

RAILWAY AGE

One of Five Simmons-Boardman Railway Publications

IN THIS ISSUE:

*Santa Fe's
Argentine Shop*

*How UP Sells
Destinations*

*C&O Resumes
AAR Membership*

*Mitchell Asks
Deregulation*

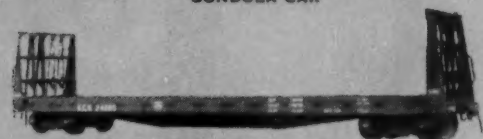
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On Car-Miles*



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GONDOLA CAR



PULPWOOD CAR



FLAT CAR



PASSENGER CAR

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RAILWAY AGE

November 29, 1954

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Week at a Glance

Unity of purpose among railroad managements has moved a long step closer to reality, with achievement of "a common understanding" between the AAR, the C&O and the NYC. One possible result of the "rap-prochement" is a Federation for Railway Progress supported by railway suppliers but independent of railroad management. **7**

"A possible answer to piggyback" is how NYC President Perlman describes his road's new fast Chicago-New York freight train, "NY-4." Central also is establishing a new system of continuous yard-to-yard checking of freight train and car movement. **11**

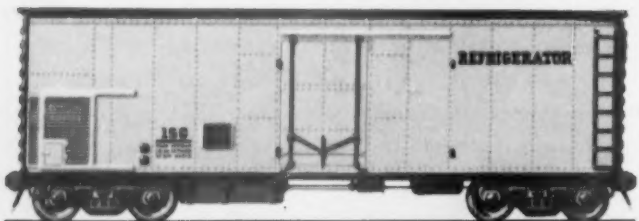
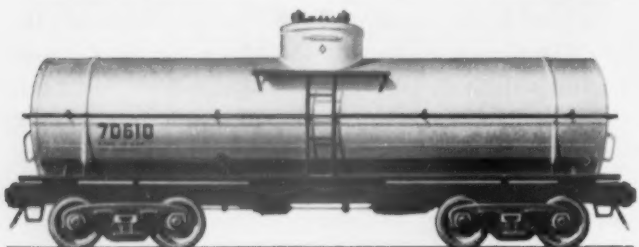
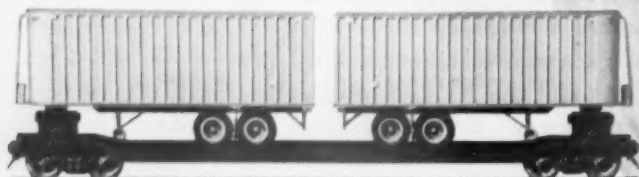
Mergers were in the spotlight last week, with nine roads moving for control of the Illinois Terminal; the L&N planning to absorb the NC&StL; and Wall Street buzzing with reports of a possible Great Northern-Northern Pacific combination. The latter report, however, has been vigorously denied by an executive spokesman for one of the roads, who told *Railway Age* it is just "an old idea that keeps recurring" and has "absolutely no foundation." **12**

Deregulation of railroads, to give all agencies of transportation equal opportunity in a highly competitive field, was called for by ICC Chairman Mitchell in a strongly worded address before the 47th annual meeting of the National Industrial Traffic League. **15**

FORUM—Base freight rates on car-miles? That's what a British economist—Professor Gilbert J. Ponsonby—has proposed and, while the proposal is a radical one, it offers some mighty interesting possibilities. **27**

The tour of the DL-600—from coast to coast on 23 roads, Alco's all-purpose demonstrators logged 50,000 service miles proving the efficiency and versatility. **28**

THERE'S A BIG DIFFERENCE IN FREIGHT CARS ...



**especially
at
the
wheels!**

Even wide-eyed little Willie can spot the difference, say, between a boxcar and one of the fleet new "piggy-back" flatcars on which so many highway trailers are hitching rides these days. But to see the *most important difference* in cars you must look at the wheels. *There's* the difference that enables so many cars to roll faster—smoother—unhampered by hot boxes—with less motive power and maintenance cost to the railroads and more benefit to everybody. When you see the name **HYATT** on the journal boxes, you know the car is as modern as the Diesel that pulls it, because it's equipped with "the running mate of Diesel freight"—*Hyatt Roller Bearings!* Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.

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Current Statistics

Operating revenues, nine months	
1954	\$ 6,975,490,037
1953	8,082,250,257
Operating expenses, nine months	
1954	\$ 5,546,999,420
1953	6,087,046,185
Taxes, nine months	
1954	\$ 658,143,188
1953	972,804,921
Net railway operating income, nine months	
1954	\$ 580,613,411
1953	845,430,758
Net income, estimated, nine months	
1954	\$ 394,000,000
1953	650,000,000
Average price railroad stocks	
November 23, 1954	77.81
November 24, 1953	59.11
Carloadings, revenue freight	
Forty-six weeks, 1954	30,063,744
Forty-six weeks, 1953	34,565,794
Average daily freight car surplus	
November 13, 1954	28,785
November 14, 1953	20,641
Average daily freight car shortage	
November 13, 1954	2,716
November 14, 1953	1,858
Freight cars on order	
November 1, 1954	12,853
November 1, 1953	35,171
Freight cars delivered	
October 1954	1,817
October 1953	8,727
Average number of railroad employees	
Mid-October 1954	1,054,602
Mid-October 1953	1,214,550

RAILWAY AGE IS A MEMBER OF ASSOCIATED BUSINESS PUBLICATIONS (A.B.P.) AND AUDIT BUREAU OF CIRCULATION (A. B. C.) AND IS INDEXED BY THE INDUSTRIAL ARTS INDEX, THE ENGINEERING INDEX SERVICE AND THE PUBLIC AFFAIRS INFORMATION SERVICE. RAILWAY AGE INCORPORATES THE RAILWAY REVIEW, THE RAILROAD GAZETTE AND THE RAILWAY AGE GAZETTE.

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Week at a Glance CONTINUED

How the UP sells destinations — weekly “wish-you-were-here” column for newspaper travel editors wins friends and boosts vacation travel by rail. **32**

Santa Fe's new maintenance shop, part of its Argentine (Kan.) diesel facilities, has crane capacity to pick up entire locomotive, is heated by radiant system, and employs new ventilating theory. **33**

BRIEFS

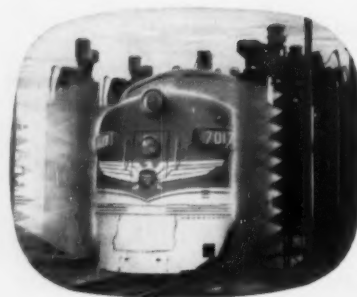
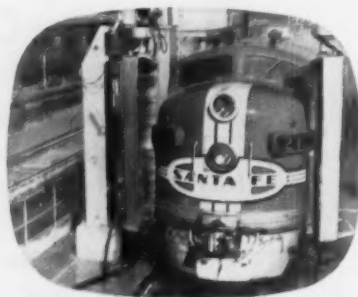
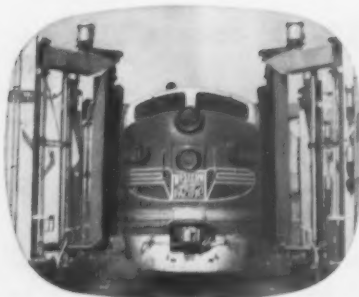
“Preserve the ‘great concourse’ of Grand Central Terminal,” says the magazine Architectural Forum, in an “open letter” to the New York Central and New Haven Railroads. The letter reflects the views of 235 of the country's leading architects, 220 of whom asked that any development or rebuilding plan for the terminal area provide for retaining the concourse. “It belongs,” they said, “to the nation. . . It is one of those very few building achievements that . . . has come to stand for our country.”

“Unsatisfactory for our purposes” is the New Haven's verdict on the experimental “rail buses” which it ordered a couple of year ago from the Mack Motor Truck Corporation (*Railway Age*, March 24, 1952). Accordingly, the buses are available for sale to railroads where different traffic patterns may make them more useful.

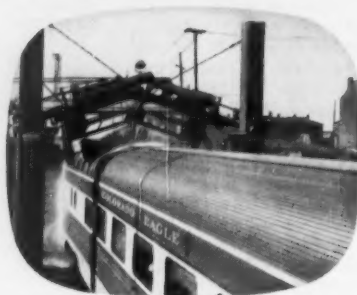
Adoption of continental time (i.e., with hours from midnight to noon designated from 1 to 12, and those from noon to midnight designated from 12 to 24) has been recommended to the AAR by the Eastern Association of Car Service Officers. The continental system, car service officers feel, would offer appreciable advantages in connection with mechanical accounting systems, particularly in those relating to car accounting.

“This is a cordial invitation for all of you to ride with us—often—during the coming months,” President Warren W. Brown has told all holders of Monon annual transportation.

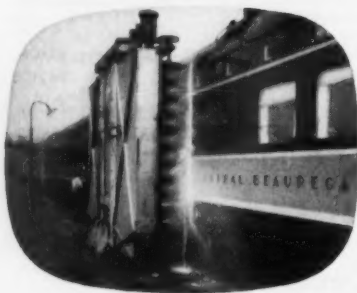
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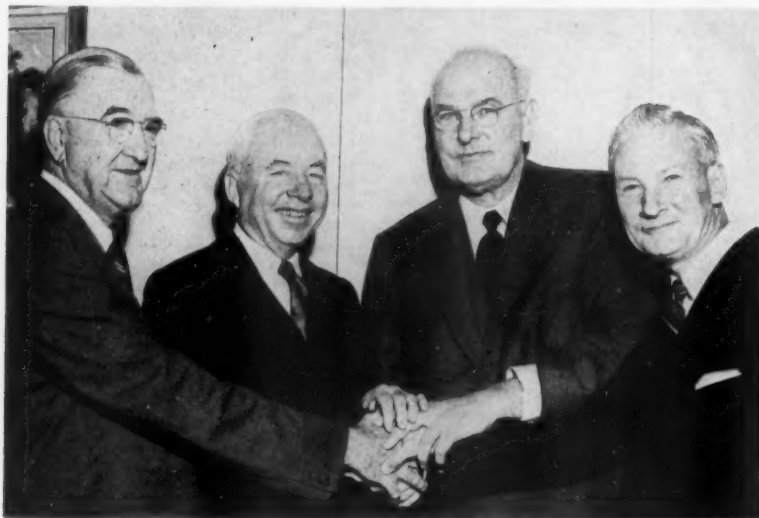
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NORMAN C. NAYLOR, ROBERT R. YOUNG, WILLIAM T. FARICY AND WALTER J. TOUHY ANNOUNCE THAT . . .

Railroad Managements Achieve Unity

C&O resumes full AAR membership, NYC continues its AAR role, as Young joins Faricy in settling "differences"

"Mutual efforts to achieve a common understanding" among executives of Class I railroads have resulted in the Chesapeake & Ohio rejoining the Association of American Railroads as a full-fledged member, a position that road had not occupied since 1946 when, under the chairmanship of Robert R. Young, it withdrew from participation in industry policy, legal, public relations and advertising activities of the association.

The restoration of unity among the large railroads was announced November 19 in a joint statement by William T. Faricy, AAR president, Mr. Young, now chairman of the New York Central, and Walter J. Touhy, president of the C&O, on the occasion of the annual AAR member road meeting in New York on that date.

New York Central Stays In—Following the change in control of the New York Central last summer to a group headed by Mr. Young, there was much speculation concerning that road's future relationship with the AAR. The November 19 joint statement cleared up any doubts in this respect by pointing out that the Central has decided to maintain its full participation in AAR activities. It also was announced that NYC President Alfred E. Perlman had been

elected to the AAR directorate, as was Mr. Touhy and Patrick B. McGinnis, president of the New Haven.

"Appointment by the President of the United States of a Cabinet Com-

mittee on Transport Policy and Organization, to make a comprehensive, up-to-date review of overall transportation policies and problems," said the joint statement of the three executives, "is encouraging evidence of greater concern on the part of government about some of the major ills affecting transportation. In view of this fact, and in order that the railroad industry may be in a position to give united support to a program of improvement of conditions in the transportation field, we have felt that those of us in the railroad industry should make every effort to settle our own differences.

"The able group of advisers which the President's Cabinet Committee on Transportation has enlisted to help it formulate a constructive and realistic transportation policy, gives hope of effective action which is long overdue. It is our belief that unity on the part of the railroads will constitute a helpful force in furthering the work of the Cabinet Committee, and we are happy that our mutual efforts to achieve a common understanding have been successful."

An "Independent" FRP—At the time the C&O, under Mr. Young's leadership, withdrew in 1946 from full AAR membership, he founded the Federation for Railway Progress. The FRP now has some 17,000 individual and corporate members, the largest contributors to its support being the C&O and the Allegheny Corporation, one of the companies under control of the group led by Mr. Young. At the time the joint statement was made,

PLENTY TO BE GRATEFUL FOR — AN EDITORIAL

Two days in mid-November will long be memorable for the railroads. On November 18, Chairman Richard E. Mitchell of the Interstate Commerce Commission made a courageous and unequivocal address to the nation's principal shippers (i.e., the National Industrial Traffic League), alining himself with those who advocate equality of regulation in transportation. Then, on the very next day, President Faricy of the AAR—along with Chairman Robert R. Young of the New York Central and President Walter J. Touhy of the C&O—gave notice of the end of the organizational schism in the railroad industry.

The difficulties of the railroads are not inherent, but wholly institutional—that is, man-made. And men in important positions to do things to overcome these difficulties are taking the necessary steps toward that end. There is plenty for railroad people, and all Americans interested in transportation, to be thankful for at this Thanksgiving season.

Mr. Young disclosed that active negotiations are now in progress between officers of the federation and prominent railway suppliers, the purpose of which would be to make the federation independent of any railroad management participation or control — converting it into an organization which could promote public understanding of railroad problems and accomplishment, but completely free of control by any interests actively engaged in railroading."

Norman C. Naylor, chairman of the executive committee of the Railway Business Association, was with Messrs. Faricy, Tuohy and Young when they released their joint announcement. At the RBA annual meeting on November 18, said Mr. Naylor, that organization of railway suppliers appointed a committee to report back within 60 days with a plan for enlarging the activities of the association. He explained that prominent members of the RBA were among those conducting negotiations with the officers of the FRP, and that these suppliers "believe that the federation offers a vehicle through which increased educational activities proposed by the Railway Business Association may be effectively carried on."

"Constructive" Program Hailed —Mr. Faricy said the railroads are "grateful for the increased interest which railway suppliers are showing in the welfare of the railroad industry, alike on the part of the RBA and of the so-called Committee of Railway Suppliers, which last spring initiated a broad program of public education for better understanding of railroad problems. If the leaders among railroad suppliers can achieve the same degree of organized unity that those of us in railroad management have now attained, I believe it will be a further tribute of appreciation to the

constructive work which the friends of transportation in Congress and the Administration are carrying on."

The FRP, Mr. Faricy went on to say, "if independent of any control or direction by the railroads, could become a common meeting ground for many 'outside' friends of the railroads, and its magazine *Railway Progress* could become a vehicle of wide educational influence. We now have achieved unity in the organization of railroad managements. The project which the RBA is undertaking and of suppliers in their negotiations with the FRP, bids fair to achieve the same kind of organizational unity among non-management forces favorable to the railroad industry. I believe this would constitute an important accomplishment for our industry, and I hope to see it successfully consummated."

RBA Gets Novel Slant On Railway Story

Some 900 members and guests of the Railway Business Association, attending its 46th annual dinner at New York on November 18, got an unusual and refreshing slant on the "railroad story," from Roger Price, cartoonist and raconteur.

Mr. Price, whose appearance at the dinner was arranged by the Railroad Public Relations Association, described and illustrated some of the railroads' problems, with special emphasis on the difficulties they have encountered in convincing Congress and the public of the seriousness of those problems.

P. Harvey Middleton, president of the RBA, presided at the dinner. George C. Frank, president of the RPRA, and assistant to president of the Erie, introduced Mr. Price.

EMERGENCY BOARD IN CONDUCTORS' CASE

President Eisenhower has created an emergency board to investigate the dispute between the railroads and those of their employees who are represented by the Order of Railway Conductors and Brakemen. The dispute involves a demand for graduated pay based on weight on drivers of the locomotive (*Railway Age*, November 15, page 9.) The union's officers had authority to call a strike pursuant to a vote taken some time ago but no date for a walkout had been set when the President acted.

mended that the pattern be applied there, too; and that would make the raise effective as of December 16, 1953. As to hours, the board said the raise should apply to the basic month of 205 hours which Pullman conductors won in an arbitration award of last June 1.

The increase on the recommended basis would raise the basic monthly rate by \$36.90, of which \$26.65 would be the escalation adjustment and \$10.25 the new 5-cents-per-hour raise. The basic monthly rate applicable during the first year of employment would be \$394.75.

The ORC&B contended for a basic monthly rate of \$406, the additional \$11.25 being claimed to restore "historical" relationships to wages of railroad conductors. The board rejected the claim with this comment:

"The spread in the difference in basic pay between the two types of employees does not in itself constitute an inequity. It rather emphasizes the differences in the category of the occupation and the consequent different standards used in establishing their respective basic wage. . . . This board concludes that the brotherhood has not established the inequity claimed and that an increase in excess of the pattern would in itself constitute an inequity as against comparable non-operating Pullman and railroad employees."

As to vacations, the union sought three weeks for men with 10 years of service. There again the board adhered to the pattern which granted three weeks only after 15 years of service.

"An examination of the record," the report said, "reveals no valid reason for sustaining this request and thereby granting Pullman conductors vacation benefits enjoyed by no other craft in the railroad industry."

C & EI Directors Meet With Labor Leaders

Directors of the Chicago & Eastern Illinois, during a recent two-day inspection of the railroad and its territory aboard a special train, were

Labor & Wages

Pullman Wage Board Reports

Recommends settlement of conductors' dispute on basis of pattern set in cases involving railroad operating employees

An emergency board has submitted to President Eisenhower a report recommending that the Pullman conductors' wage dispute be settled on the basis of the pattern set in cases involving railroad operating employees and other train-service employees of the Pullman Company.

The recommended pattern would give the conductors involved an adjustment which would incorporate the escalator-clause (cost-of-living) increases of 13 cents per hour into the basic rates and further increase those rates by 5 cents per hour. Also, it would give a third week of paid vacation annually to Pullman conductors with 15 or more years of service.

Members of the board were Chairman Edward F. Carter, justice of the Supreme Court of Nebraska; Edward B. Bunn, S.J., president of Georgetown University; and Howard A. Johnson, former chief justice of the Supreme Court of Montana. The Pullman conductors were represented by the Order of Railway Conductors & Brakemen, which had issued a strike call, canceling it after the board was created.

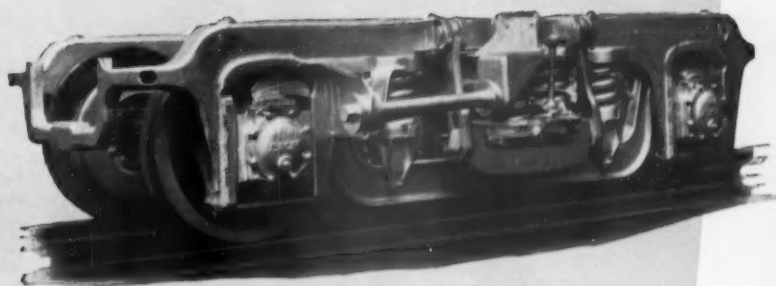
There was no disagreement as to the amount of the wage increase, but its retroactive application and the hours per month to which it would be applied were in dispute. As to the retroactive phase, the board recom-

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Commonwealth Trucks with outside spring suspension assure better,

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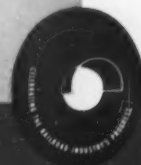
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1 Panel intersections with Met-L-Wood can be made invisible from outside with the use of split rivets. Floor connections may be made in a variety of ways, one of which is shown here, using through-rivets and metal screws.

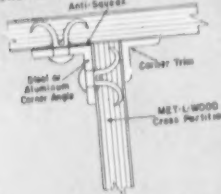
2 Interior doors of Met-L-Wood can be fitted with aluminum extrusion door stops; or the Met-L-Wood partition formed so that the door stop is an integral part of the panel.

3 Steel tapping plate inserts can be put in Met-L-Wood doors at proper places for solidly anchoring hinges and door-opening devices. Note simplicity of using zipper-type window sash with pre-formed Met-L-Wood window openings.

4 Square or rounded corners are made with Met-L-Wood panels and steel or aluminum corner forms. Corner forms can also be fastened with split rivets or through-rivets, as well as with wood or metal screws.

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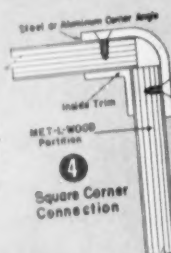
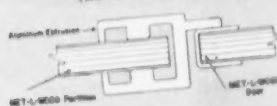
Panel Intersection Connections



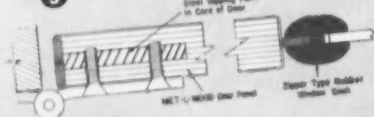
Floor Connection



2 Interior Door (Alum. Extrusion Constr.)



3 End and Vestibule Doors



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November 29, 1954 RAILWAY AGE

joined for part of the trip by 18 general chairmen of operating and non-operating unions on the property.

The union leaders were guests of the directors at luncheon aboard the train and they then traveled together from Danville, Ill., to Clinton, Ind.

Canadian Employees Win Some Fringe Benefits

Non-operating employees of Canadian railroads have been awarded "fringe benefits" with an estimated annual value of approximately \$7,000,000 in an arbitration award by Gordon Sloan, chief justice of British Columbia.

His award provides for five statutory holidays, at an estimated yearly cost to the railroads of \$4,281,000; and paid vacations of three weeks instead of the present two for employees with 15 or more years of service, which will cost the companies \$2,650,000 per year. This figure also includes the cost of extending from one and one-half to two weeks vacations for employees with from three to five years' service. Both awards are to become effective January 1, 1955.

The awards represent only a small part of what unions representing the employees had sought. Their original demands, served on the railroads about a year ago, called for seven paid holidays and various health and welfare benefits, which would have cost an estimated \$60,000,000 per year.

The smaller settlement, however, is binding on both parties, since the Canadian federal government, in effect, forced arbitration of the dispute to avert a threatened strike after direct negotiations broke down (*Railway Age*, September 27, page 26).

"Subsidy" Suggested—Justice Sloan accompanied his arbitration award with a suggestion—which is not binding—that the railways be subsidized out of federal funds for losses they sustain in handling western Canadian grain under very low statutory rates imposed by the so-called "Crow's Nest Pass Agreement." He explained his excursion into the rate question by stating that the railways had argued before him their "inability to pay," and that an important contributing factor to that inability is the low grain rates.

These same rates were sharply attacked by N. R. Crump, senior vice-president of the Canadian Pacific, in a November 19 address to the Vancouver Board of Trade. They apply, he said, on about one-third of all the CPR's freight traffic, but are still at the level originally established in 1899; in real purchasing power, he explained, they are only about one-quarter of what they were at that time.

Mr. Crump added, however, that his company is not seeking government assistance, but rather more freedom and less regulation, to permit it to produce and price its services in accordance with the "realities of the situation."

Operations



NEW YORK CENTRAL'S FAST, NEW Chicago-New York freight train, the "NY-4," completed its first run ahead of schedule in 23 hours, 14 min. Left to right, Conductor F. J.

Letzelter and Brakemen Richard Flagg, R. L. Reed and Leo Bolduo, are being welcomed in New York by John H. Olson, general yardmaster at the 33rd Street yard.

NYC Fast Freight "May Be Answer to Piggyback"

A fast, new through freight service from Chicago to New York, just made available to shippers by the New York Central, "may prove to be the Central's answer to piggyback," Alfred E. Perlman, NYC president, has said. "When we can better the service of trucks and properly price our product," he added, "railroads need fear no deterioration of their dominant position as the principal medium of mass transportation in America."

The new train, designated by a time-card symbol "NY-4," brings meat, vegetables, other foodstuffs and general freight into New York City on a regular schedule for pre-dawn, second-morning delivery, cutting 4 hours off the fastest previous delivery time to receivers by the Central. A permanent name for the train will be selected through a contest among NYC employees.

First of Several Steps—Mr. Perlman described the new train as "the first of a number of steps planned to speed up the Central's freight service and to make it the best available." With the service, he pointed out, the NYC is taking additional advantage of its unique position as the only railroad having freight tracks entering Manhattan island. After the initial run, which ended in New York November 18, traffic demands quickly boosted the size of the train from its original 40 cars to an 80-car length.

"NY-4" is assembled in the Blue Island, Ill., yard of the NYC-affiliated Indiana Harbor Belt, in the Chicago area, from which the diesel-powered train starts its eastward run at 10 p.m. The train stops only for crew changes at division points, and for icing its refrigerator cars at Wayneport, N. Y. At Spuyten Duyvil, just north of Manhattan, cars are cut out for switching to freight stations in the Bronx. The train then goes to freight terminals on Manhattan's west side for a scheduled 4 a.m. arrival.

NYC Speeds Freight Service With Yard-to-Yard Check

The New York Central plans to establish a continuous yard-to-yard check on movement of freight cars and trains that, in its final form, will constitute an innovation in railroad procedure, according to Fred N. Nye, NYC director of transportation research. Mr. Nye spoke in Chicago during the first day of the November 16-18 meeting of the Railway Systems & Procedures Association, a more detailed report of which is scheduled to appear in the December 6 *Railway Age*.

The Central, Mr. Nye continued, is planning a network of yards connected, by automatic Teletypewriter switching equipment, to each other and to service bureaus. When the system is completed, the NYC will have current information about each of 1,000 daily freight trains and 53,000 freight cars.

The road will be able to report promptly to its shippers the exact whereabouts of their loaded cars or their special equipment. Teletypewriter switching equipment will be designed to report outbound train consists to the yard next ahead, and inbound and outbound consists to district service bureaus. Most of the yards will have electric accounting equipment.

"Teletypewriter installations are being made by the American Telephone & Telegraph Co. and its affiliates in yard offices at Englewood and Blue Island, each connected over a leased circuit to yards at Elkhart, Ind., and Niles, Mich.," Mr. Nye said, describing

ing the first phase of the program. Following installation in the Chicago area, he added, circuits and Teletypewriter equipment soon will be progressively installed on a yard-to-yard basis working east along the main line to New York. Additional installations will be made later on the Michigan Central and Big Four districts.

"Our overall plan," Mr. Nye concluded, "contemplates expanding our communication network to interconnect some 69 principal yards strategically located. When electric accounting equipment on order becomes available, the Central plans to install card punches and tape-to-card and card-to-tape machines."

Financial

L&N—NC&StL Merger?

Plans to develop it will "proceed promptly," says L&N, after two-year study is examined by its directors

Merger of two Class I railroads—the 4,700-mile Louisville & Nashville and the 1,000-mile Nashville, Chattanooga & St. Louis—appears definitely to be in the offing. The L&N announced in New York on November 18 that its directors had adopted a resolution directing its officers to "initiate definite plans for the merger."

A. L. M. Wiggins, chairman of the L&N board, issued a statement which said: "For a number of years, consideration has been given to the question of merging . . . and during the past two years specific studies have been made as to the effect of such a merger."

"These studies show conclusively that a merger will be consistent with the public interest and in the interest of both railroads, their security holders and their employees. Service will be improved, savings in costs of operation will be effected, and the added strength of the combined organization will enable these railroads to better meet the highly competitive conditions confronting the railroad industry. The proposed merger represents an effort to effect the greatest degree of economy in operation of these properties while maintaining the highest degree of service to the public."

"Every effort will be made to preserve all the advantages now enjoyed by both railroads and in particular, their fine public relationships. The full cooperation of shippers and public will be sought in support of the stronger and more effective organization and service that will result from the merger."

Exchange of Stock—"The plan to be considered will involve an exchange of common stock of the L&N for stock of the NC&StL. The L&N owns 191,747 shares of the total of

256,000 shares of the NC&StL. It is also a guarantor of the first mortgage bonds of the railway."

"Plans to develop the merger will proceed promptly."

Nine-Road Group to Buy Illinois Terminal

The Illinois-Missouri Terminal Railway Company, formed by nine railroads operating into St. Louis, has requested Interstate Commerce Commission authority to purchase the Illinois Terminal for \$20,015,635 (*Railway Age*, September 13, page 9, and August 23, page 14). IT directors have approved sale of the company to the nine-member group and the board's action was approved by stockholders at a special meeting November 19.

The petitioning group—the Baltimore & Ohio; Chicago & Eastern Illinois; Chicago, Burlington & Quincy; Gulf, Mobile & Ohio; Illinois Central; Litchfield & Madison; New York, Chicago & St. Louis; St. Louis-San Francisco; and Wabash—told the ICC that if the application is approved, more efficient service will be provided and IT facilities will be modernized and improved.

NYC Would Exchange Its Bonds for B&A Stock

New York Central directors have approved an offer of exchange of NYC bonds for stock of the Boston & Albany, which for many years has been leased to the Central. The exchange offer is subject to approval by the Interstate Commerce Commission, and

Additional Financial News will be found on page 19.

to exchange of 95% of the stock, or such lesser amount as the NYC designates.

For each share of B&A stock the Central will offer a \$150 25-year collateral trust 6% bond. Each \$150 bond will be secured by one B&A share, plus \$150 of NYC refunding and improvement mortgage 5% bonds, series C. The new bonds will be entitled to a sinking fund. Current market price of B&A stock is \$135 bid per share.

Robert R. Young, NYC chairman, said "if sufficient stock is exchanged, as we are sure it will be, the stockholder will improve his position by becoming a holder of bonds of a face amount substantially above the market price of his stock, secured by a lien on the lines of a major railroad, and will receive more income per year. Central is able to make this offer because of savings made possible if the exchange offer is successful."

The Central also announced it will make offers to exchange \$125 of 5¼% NYC bonds for each share of the Ware River, and \$100 of 5¼% NYC bonds for each share of the Pittsfield & North Adams. The WR and P&NA are leased by the Central.

People in the News

Dr. Homberger Dies

Dr. Ludwig M. Homberger, professor of transportation at the American University, Washington, D. C., died in that city on November 22.

Dr. Homberger was formerly a general officer of the German railroads, having served first as comptroller and then as the member of the directorate in charge of finance, accounting and law. He left Germany during the Hitler regime and came to AU in 1939. In addition to serving as professor of transportation, he was director of the several transportation institutes conducted by the university.

Figures of the Week

Freight Car Loadings

Car loadings of revenue freight for the week ended November 20 were not available when this issue of *Railway Age* went to press.

Loadings for the week ended November 13 totaled 708,757 cars; the summary compiled by the Car Service

Division, Association of American Railroads, follows:

REVENUE FREIGHT CAR LOADINGS

For the week ended Saturday, November 13			
District	1954	1953	1952
Eastern	116,898	120,190	138,280
Allegheny	125,539	140,444	160,361
Poconantas	54,108	52,654	64,398
Southern	127,095	123,951	131,625
Northwestern	95,774	106,212	135,430
Central Western	130,099	123,541	135,251
Southwestern	59,244	60,066	63,405
Total Western Districts	285,117	289,819	334,086
Total All Roads	708,757	727,058	828,750
Commodities:			
Grain and grain products	61,139	48,490	52,413
Livestock	12,455	12,685	15,693
Coal	130,703	128,527	152,853
Coke	9,078	11,933	14,685
Forest products	44,574	44,223	43,839
Ore	31,377	49,510	80,605
Merchandise i.c.l.	64,161	66,929	73,980
Miscellaneous	355,270	364,761	394,682
November 13 ..	708,757	727,058	828,750
November 6 ..	695,097	747,868	829,295
October 30 ..	736,233	780,843	862,116
October 23 ..	746,007	804,413	760,773
October 16 ..	721,402	822,582	838,408
Cumulative total, 46 weeks			
	3,006,744	34,565,794	33,831,955

In Canada.—Carloadings for the 10-day period ended October 31 totaled 101,516 cars, compared with 77,379 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
October 31, 1954	101,516	38,658
October 31, 1953	118,675	44,240
Cumulative Totals:		
October 31, 1954	3,049,754	1,183,174
October 31, 1953	3,363,598	1,371,209

Securities

Authorizations

FORT DODGE, DES MOINES & SOUTHERN.—To issue and sell \$350,000 of first mortgage 5% bonds to the Metropolitan Life Insurance Company, its application for a loan of like amount from the Small Business Administration having been denied. (*Railway Age*, September 6, page 57). Division 4 also approved issuance of an unsecured promissory note for \$15,000 to evidence a loan of like amount from the Lehigh Sewer Pipe & Tile Co., the proceeds from the bonds and the loan to be used for rehabilitation of property damaged in a flood.

NEW YORK, NEW HAVEN & HARTFORD.—To assume liability for \$2,595,000 of equipment trust certificates to finance in part 85 covered hopper cars, 11 sleeping cars and four bedroom-buffet-lounge cars costing an estimated \$3,475,000 (*Railway Age*, October 4, page 63). Division 4 approved sale of the certificates at 3% interest for 99.5—the bid of Salomon Bros. & Hutzler and three associates—which will make the annual cost of the proceeds to the railroad approximately 3.25%. The certificates were reoffered to the public at prices yielding from 1.75 to 3.25%, according to maturity.

Application

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—To assume liability for \$7,200,000 of equipment trust certificates to finance in part the following diesel-electric locomotives costing an estimated \$9,121,371.

Description and Builder	Estimated Unit Cost
12 1,750-hp road-switchers (Electro-Motive Division, General Motors Corporation)	\$159,538
9 1,600-hp all-purpose switchers (Fairbanks Morse & Co.)	147,759
28 1,200-hp switchers (Electro-Motive)	111,374
14 1,200-hp switchers (Electro-Motive)	114,066
11 1,200-hp switchers (Fairbanks Morse)	105,608

The certificates, dated November 1, 1954, would mature in 30 semiannual installments of \$240,000 each beginning May 1, 1956. They would be sold by competitive bidding with interest to be determined by such bidding.

GREAT NORTHERN.—To assume liability for \$8,880,000 of equipment trust certificates to finance in part the acquisition of equipment (listed below) which is expected to cost a total of \$11,108,500.

Description and Builder	Estimated Unit Cost
1,000 box cars (Great Northern shops) ..	\$ 6,700
5 109-seat dome lounge cars (Budd Company)	340,500
12 70-seat dome coaches (Budd)	225,500

The certificates would be sold on the basis of competitive bids which would fix the interest rate. They would mature in 30 semiannual installments of \$296,000 each, beginning July 1, 1955.

Dividends Declared

BEECH CREEK.—50¢, payable January 3 to holders of record December 3.

BESSEMER & LAKE ERIE.—preferred, \$1.50, semiannual, payable December 1 to holders of record November 15.

CINCINNATI, NEW ORLEANS & TEXAS PACIFIC.—common, \$4, payable December 24 to holders of record December 20; 5% preferred, \$1.25, quarterly, payable March 1, 1955, June 1, September 1 and December 1, to holders of record February 15, 1955, May 16, August 15 and November 15.

ERIE & PITTSBURGH.—87½¢, quarterly, payable December 10 to holders of record November 30.

INTERNATIONAL OF CENTRAL AMERICA.—5% preferred, accumulative, \$1.25, payable December 15 to holders of record December 6.

NEW YORK, CHICAGO & ST. LOUIS.—common, 75¢, quarterly; 6% preferred A, \$1.50, quarterly, both payable January 3 to holders of record November 26.

PHILADELPHIA, GERMANTOWN & NORRIS-TOWN.—\$1.50, quarterly, payable December 4 to holders of record November 20.

Security Price Averages

	Nov. 23	Prev. Week	Last Year
Average price of 20 representative railway stocks	77.81	75.75	59.11
Average price of 20 representative railway bonds	97.11	96.89	90.70

Equipment & Supplies

Serviceable Freight Fleet Lost 62,370 Cars in Year

Class I railroads and their car-line affiliates lost 62,370 cars from their serviceable fleets during the 12 months ended October 31.

The serviceable fleet as of November 1 totaled 1,699,762 cars, compared with 1,762,132 on November 1, 1953. Meanwhile, the number of cars undergoing or awaiting repairs increased by 32,033—from 94,758 to 126,791. Thus total ownership as of November 1 was 1,826,553—down 30,337 from the total of a year earlier.

These data were included by Chairman A. H. Gass of the Car Service Division in his latest review of "The National Transportation Situation." Mr. Gass noted that, during the two months since his previous review, the backlog of new cars on order increased by 1,019—to 13,335.

FREIGHT CARS

The **Central of Georgia** has ordered eight 50-ton 40½-ft box cars, equipped with compartmentizers, from the Pullman-Standard Car Manufacturing Company at an estimated cost of \$66,500.

The **Santa Fe** has ordered 1,300 freight cars. The General American Transportation Corporation will build 500 70-ton gondola cars; the Pullman-Standard Car Manufacturing Company, 400 50-ton box cars, of which 300 will be insulated; and the road's own shops, 250 50-ton flat cars and 150 70-ton gondola cars. The road's inquiry for this equipment was reported in *Railway Age*, September 27, page 26.

LOCOMOTIVES

Class I Roads Install 986 Locomotives in 10 Months

Class I railroads put 986 new locomotive units in service in the first 10 months of 1954, compared with 1,839 in the comparable 1953 period, the Association of American Railroads has announced. The 1954 total included 971 diesel-electric units and 15 gas turbine-electric locomotives; the 1953 installations, 1,822 diesel-electric units and 13 steam and four gas turbine-electric locomotives.

October 1954 installations by Class I roads totaled 33 new locomotive units, including 32 diesel-electric units and one gas turbine-electric locomotive, compared with October 1953 installations of 155 diesel-electric units and one steam locomotive.


On November 1, Class I roads had on order 158 new locomotive units, including 148 diesel-electric units and 10 electric locomotives, compared with 603 diesel-electric units, and two steam, 10 electric and 15 gas turbine-electric locomotives on order November 1, 1953.

PASSENGER CARS

The **Wabash** has ordered three sleeping cars of the six roomette-four bedroom-six section type from the Pullman-Standard Car Manufacturing Company. Delivery is expected in the third quarter of 1955.

SPECIAL


An order for 50 low-temperature systems specially designed for a fleet of "super" refrigeration cars to be built for the **Pacific Fruit Express Company** has been announced by Charles V. Fenn, vice-president, Machinery & Systems division, Carrier Corporation. The new systems automatically provide temperatures down to minus 10 deg F, regardless of outside conditions, Mr. Fenn said. (*More News on page 18*)



Save time and money in the make-up yard

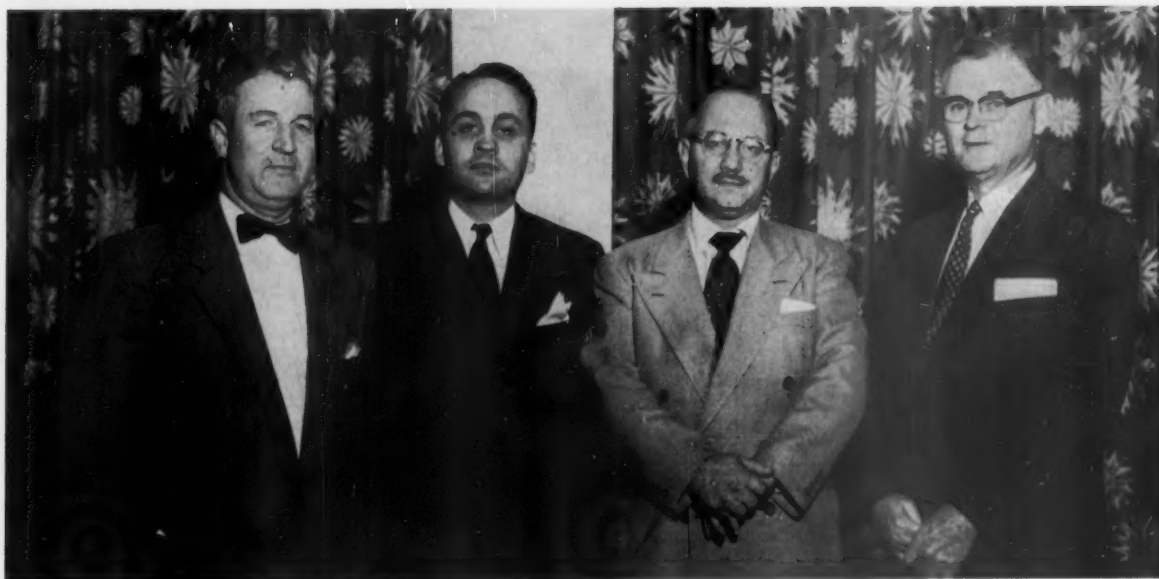
To save time and money in the make-up yard
use Westinghouse Type D Automatic Pneu-
matic Slack Adjusters.

**Westinghouse Air Brake
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AIR BRAKE DIVISION  WILMERDING, PA.

NEW MOVIE AVAILABLE entitled, "*AT THIS MOMENT*"—showing a vivid story of modern railroad progress. Length 26 minutes, on 16 mm. color sound film. For use of film write: United World Films, Inc., 1445 Park Ave., New York or Association Films, Inc., 347 Madison Ave., New York.





NATIONAL INDUSTRIAL TRAFFIC LEAGUE OFFICERS for the coming year are, left to right, Lester J. Dorr, Washington, D.C., executive secretary; Grant Arnold, general traffic manager, E. J. Lavino & Co., Philadelphia, treasurer; D. G. Ward, director of transportation, Olin

Mathieson Chemical Corporation, Baltimore, vice-president; and Lowe P. Siddons, traffic manager, Holly Sugar Corp., Colorado Springs, president. George H. Shafer, St. Paul, succeeded Mr. Ward as Executive Committee chairman; E. W. Gorton, Chicago, is vice-chairman.

MITCHELL CALLS FOR . . .

Deregulation of Railroads

ICC chairman tells National Industrial Traffic League "rules should be the same for all" in keenly competitive transportation industry

I want transportation regulatory laws changed so the rules will be the same for all," Interstate Commerce Commission Chairman Richard F. Mitchell told the 47th annual meeting of the National Industrial Traffic League in New York on November 18.

"If you believe in private ownership of transportation," he said, "regulation must change. . . . The profit system should apply to regulated as well as to non-regulated industries." This objective he emphasized elsewhere in his address by quoting, and expressing warm approval of, a recent statement by R. C. Waehner, general manager of the distribution division of Lever Brothers Company as reported in *Railway Age* November 15, to the effect that shippers and carriers should join in seeking removal of "outmoded and unrealistic rules and regulations" in order that the carriers may have "the freedom of decision enjoyed by industrial management."

The commission chairman, warning his audience of industrial traffic managers that they "might not like" what he termed his "own individual views on regulation," began his speech by saying that regulatory laws of 30 years ago—when railroads "had a monopoly" and "were a little high-handed"—"are still on the statute books, while transportation has become a highly com-

petitive business. We are for competition, but competition means equal opportunity for all, and that all must be treated alike."

If laws are changed "so the rules will be the same for all," Mr. Mitchell said, "business would go to the agency of transportation which can furnish the best service," and as a result, shippers "will get better service at lower cost."

Wants Specific Changes

Specifically, Commissioner Mitchell declared himself in favor of:

- Repeal of Section 22 of the Interstate Commerce Act, which permits less-than-commercial rates on government shipments. "There is no reason," he said, "for any agency of government to receive any rebate or discount on rates."
- Repeal of the provision for "reparations" on railroad rates, which he said does not apply to truck rates and is something he "would never impose on trucks."
- Repeal of the exemption from regulation now provided for water carriers transporting only bulk commodities.
- Prohibiting other departments of government, in-



REGIONAL VICE-PRESIDENTS of the National Industrial Traffic League for 1954-55 include, in the usual order: C. S. Connolly, Los Angeles; Kenneth Tubbs, Amarillo, Tex.; Norman G. Crafts, Watertown, Mass.;

H. D. Rhodehouse, Cleveland; L. O. Kimberly, Jr., Atlanta; and Perry M. Gish, Pittsburgh. Vice-presidents Ray H. Thompson, of Newton, Iowa, and F. C. Forward, of Minneapolis, were not available for this photograph.

cluding the Department of Agriculture, from litigating orders of the ICC.

- Repeal of excise taxes on freight and passenger transportation.
- Ending the commission's waybill studies.
- Changing some law enforcement procedures.
- Permitting regulated carriers to compete with private carriers on the same basis on which private carriers are now able to operate.
- Taking steps to reduce the railroads' passenger deficit, advocating as one such step "the combining of trains." Mr. Mitchell said he thought the ICC formula, which states the 1953 passenger deficit as \$700 million, is "wrong"; he used instead a figure of \$500 million, but said the railroads "have no pot of gold with which to pay such losses."

These changes, he emphasized, "would not eliminate regulation," but would "bring it up to date," and would permit railroads and trucks—"neither of which is lily-white"—to "work together to develop a sound transportation system."

What the League Wants

The league itself, in its formal business sessions, took a position directly contrary, in at least one particular, to that advocated by the ICC chairman, when it adopted a recommendation of its Special Committee on Transportation Outlook and Policy (A. H. Schwieter, chairman) that Section 303 (b) of the Interstate Commerce Act be amended "so as to provide unqualified exemption for movement of dry bulk commodities by water."

The committee, on the other hand, gave substantial support to another of Mr. Mitchell's ideas by recommending "that governmental bureaus or departments except in their official capacity as direct purchasers and users of transportation service, should not appear in proceedings before the ICC," and that "their appearances when made should be limited to transportation services in which they are directly involved and not on behalf of any special class or group of citizens."

The same committee likewise recommended, and the league approved, a change in the wording of the league's official position on the rate-making rule of the act. The new language, which the committee said "reconciles the rate-making rules in Parts I, II, III and IV of the act," reads as follows:

"The authority given the ICC to prescribe just and reasonable rates and charges for transportation of property, shall require the commission to give due consideration, among other factors (a) to the effect of rates on movement of traffic by the carrier or carriers for which the rates are prescribed; (b) to the inherent advantages of transportation by the carriers for which the rates are prescribed; (c) to the need, in the public interest, of adequate and efficient transportation service at the lowest cost consistent with the furnishing of such service; and (d) to the need of revenues sufficient to enable the carriers, under honest, economical and efficient management, to provide such service."

Mr. Schwieter's committee further proposed that the period of suspension of proposed freight rates "be reduced from seven months to an initial period of 90 days, with a proviso that the ICC may extend such period for an additional 90 days at the request of any party in interest." A corollary recommendation, also approved by the league, would provide for refunds to shippers, "upon demand," where suspended rates or charges are permitted to become effective prior to final action by the ICC and are subsequently determined to be too high.

The Committee on Transportation Instrumentalities and Car Service (Frank G. Moore, chairman) and the league as a whole concurred in "commending" the railroads "for their experiment on trailers-on-flat-car service." "Results of that experiment," the committee said, are being awaited "with great interest."

Still Concerned About Freight Cars

Mr. Moore's committee also indicated continued shipper concern over the freight car situation, when it asked, (Continued on page 18)

New Air Brake Hose Lines Cut Costs $\frac{1}{3}$ to $\frac{1}{2}$

**AEROQUIP FITTINGS ARE DETACHABLE
... USE THEM AGAIN AND AGAIN**

Steel wire provides high
burst and tensile qualities

Tough rubber cover re-
sists effects of oil,
weathering, sand blast
and abrasion

Designed for use with
your standard gladhands

Thick, oil-resistant inner
tube

Heavy steel fitting can be
removed and reused

Aeroquip announces a new type air brake hose line designed especially for diesel-electric locomotive and passenger car application.

Rugged and durable, Aeroquip air brake hose lines provide substantial savings over conventional types, with no sacrifice in performance. The fittings are detachable and may be used repeatedly for making replacement lines. Hose and fittings can be purchased in bulk and assembled quickly using standard shop wrenches... an important feature that means quick maintenance and greatly reduced inventory.

Some of America's leading railroads have already standardized on Aeroquip for replacement lines with anticipated savings of many thousand dollars. You can do the same... write for complete information.

**For all Diesel-
Electric Locomotives
and
Passenger Cars**



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REG. TRADE MARK

AEROQUIP CORPORATION, JACKSON, MICHIGAN

LOCAL REPRESENTATIVES IN PRINCIPAL CITIES IN U.S.A. AND ABROAD • AEROQUIP PRODUCTS ARE FULLY PROTECTED BY PATENTS IN U.S.A. AND ABROAD

and obtained the authority of the league "to take the following course of action":

(1) Advise rail carriers that the NITL is greatly concerned about the decline in ownership of freight equipment, the large and growing number of bad order cars, and decline in orders for new cars;

(2) Urge carriers to upgrade their existing equipment as rapidly as possible;

(3) Urge carriers to replace obsolete cars, many of which are over 25 years of age, with modern cars to more nearly meet shippers' present day needs;

(4) Establish subcommittees of this committee in each of the AAR Car Service Districts to work with carriers of that district toward a better car repair and upgrading program;

(5) Acquaint traffic officers of the various railroads with the amount of traffic lost to railroads by reason of shortages of equipment or lack of suitable equipment; and

(6) Recommend that consideration be given by carriers to the feasibility of greater standardization of box cars.

In the same general connection, the Freight Claims and Claims Prevention Committee (M. I. Adams, chairman) noted that shippers "should back up their demands for more 'damage-free' equipment with assurance that parts

of the equipment will not be lost or destroyed through shippers' negligence."

The Legislative Committee (William H. Ott, Jr., chairman) reiterated the league's previous position on a number of legislative proposals, and added a recommendation that the league oppose any bill which would prevent shippers or shipper associations from consolidating shipments for forwarding.

The LCL & Merchandise Committee (R. C. Stockton, chairman) concurred in the purpose of that recommendation, and won league approval of several of its own, namely:

(1) That the league support the principle of volume rates in harmony with Part I of the IC Act, without regard to the rate level of motor carriers;

(2) That it "actively and aggressively" promote further use of streamlined Rule 10 in connection with all-commodity rates; and

(3) That it attempt "to work out a more satisfactory or liberal split delivery arrangement than that presently in effect in railroad tariffs."

The league's 1955 meeting will be held in Chicago November 17-18; its 1956 sessions in New York; and its 1957 golden anniversary convention in Chicago, where the league was originally organized.

Railway Officers

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.—William G. Klein, general freight agent at Minneapolis, retired recently.

PENNSYLVANIA.—Wendell C. Allen, general superintendent of transportation at Chicago, has been promoted to assistant chief of freight transportation in charge of terminal operations, at Philadelphia. Mr. Allen has been succeeded by **Jacob D. Fuchs**, who returns to that position after a year of special duty. **Arthur F. McSweeney** has resumed his former post as assistant chief of freight transportation at Philadelphia after having been on special assignment in recent months.

ROCK ISLAND.—Arthur O. Gibson, secretary and treasurer at Chicago, retired October 31.

Leroy L. Olsen, assistant general freight agent at Chicago, has been named acting general freight agent there to replace **Joseph Sander**, general freight agent, who has been assigned to special duties. Mr. Olsen's successor is **Norman L. Schultz**.

E. G. Roberts, general purchasing agent, has been appointed manager of purchases and stores, while E. F. Lofvander, assistant general purchasing agent, has been appointed purchasing agent, both at Chicago. The positions of general purchasing agent and assistant general purchasing agent have been abolished.

TRUNK LINE—CENTRAL PASSENGER COMMITTEE, EASTERN RAILROADS.—Vanderbilt Arnold, chairman, will retire December 31, after a career of more than 52 years of railroad service.

VIRGINIAN.—G. W. Oxley, assistant engineer, has been appointed superintendent safety at Roanoke, Va., succeeding C. W. Dowdy, who has retired.

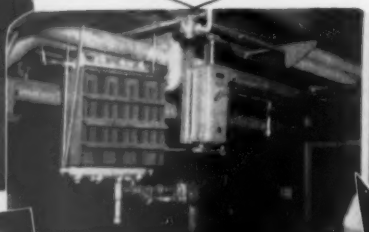


TEXAS & NEW ORLEANS.—As *Railway Age* announced September 20, page 73, Tom M. Davis has been named general counsel at Houston.

where efficient heating is required without maintenance



in the DIESEL SHOP PITs
at Argentine, Kansas,
SANTA FE RAILROAD



GRID UNIT HEATERS

Write!

Our engineering staff and representatives are ready to cooperate with you in solving your heating problems. We have spent much time and research, especially in Diesel heating and ventilating, and believe we have the correct answer to this type of heating and ventilating.

GRID cast iron heating sections having similar metals in contact with steam prevent electrolytic corrosion, and withstand corrosive fumes. . . . GRID will withstand steam pressures up to 250# P.S.I. . . . GRID low outlet temperatures, proper fan sizes and motor speeds, assure delivery of warm comfortable air in ample volume directly to the spot where it is needed. These are just some of the reasons why the nation's leading railroads, such as the Santa Fe, install GRID Unit Heaters in their diesel shop pits and other locations. GRID units installed in 1929 are still operating today . . . no ordinary unit heater can approach this record.

D. J. MURRAY MANUFACTURING CO.

MANUFACTURERS SINCE 1893

WAUSAU

WISCONSIN

Financial

New Jersey & New York.—Reorganization.—Division 4 of the ICC has authorized compensation totaling \$186,604 for parties in interest and their counsel in the reorganization of this road for the years 1938 to 1954. The aggregate compensation approved is \$566,043 less than was claimed by all parties.

Southern Pacific.—Merger of Constituent Companies.—The Southern Pacific Railroad Company and four of its lessor lines have asked the Interstate Commerce Commission to approve a plan for merging their properties into the Southern Pacific Company. The plan contemplates merger of the Arizona & Eastern El Paso & Rock Island and El Paso & Southwestern into the SP Railroad Company, and then merger of the latter and the Dawson into the SP Company.

White City Terminal & Utility.—Operation.—This road has applied to the ICC for authority to operate 3.5 miles of industrial track to provide switching and terminal services within the area known as White City, Oregon. The company owns all property and equipment of the now inoperative facility and would establish interchanges with the Southern Pacific.

Norfolk & Western.—Acquisition.—The ICC has approved this road's acquisition of D. W. Thomas' Chesapeake Western (*Railway Age*, August 2, page 11). Under terms of the agreement, N&W will obtain 6,000 shares of the capital stock and \$600,000 of first mortgage 4% bonds of the CW, in exchange for which Mr. Thomas will receive 30,000 shares of \$25-par, adjustment preferred N&W stock; \$54,286 in cash; cancellation of \$13,064 indebtedness to the CW, and land valued at \$7,650. Division 4 also approved issuance by the N&W of the adjustment preferred stock.

New Facilities

Canadian National.—Two contracts have been awarded for portions of the work on a new branch line from Beattyville, Que., to Chibougamau. Contract for that part of the new line between Beattyville and Bachelor Lake has been awarded to La Societe D'Enterprises Generales of Amos, Que. Albert Lemieux, Montreal, has received the contract for the remaining section from Bachelor Lake to Chibougamau. Both contracts cover clearing, grading, culverts, trestles and substructures of bridges.

Railway Express Agency.—REA has signed a contract with Wortman & Sons, New York builders, for construction of a \$350,000 shop-garage near the Agency's Sunnyside, Long Island, express terminal. Work is scheduled to start late this month.

Seaboard Air Line.—Work will begin soon on an \$825,000 improvement program for this road's properties at Tallahassee, Fla., major phases of which will be relocation of existing yards and some part of the main line near the city's western suburban areas. A new yard will be built just west of the city's Bloxham Heights development. The new yard will have nine tracks, one with a 150-car capacity and the other with capacities ranging from 34 to 64 cars. There also will be one 150-car passing track.

A repair and improvement program to wharves and piers at Hutchinson Island—directly across the Savannah river from Savannah, Ga.—will cost about \$950,000 and is scheduled for completion next summer. The improvements are being made because of the opening last September of a high-level highway bridge between Savannah and the island, which has provided access to the island by road for the first time. Since the SAL bought the island site in 1898 and constructed terminal facilities there, the only communication had been by rail freight lines and a small passenger ferry from the downtown Savannah waterfront.

Supply Trade

C. D. D'Amico has been named manager of sales at the Los Angeles plant of **Joseph T. Ryerson & Son, Inc.** He was formerly manager of the stainless steel department there.

Arthur Jensen, signal supervisor of the Elgin, Joliet & Eastern, has joined the **General Railway Signal**



EDWARD J. CAREY, who has been appointed sales manager for the transit and railroad division of **National Pneumatic Company** and **Holtzner-Cabot Divisions**. He was formerly sales engineer in the New York branch office.



MUSCOE BURNETT, JR., who has been appointed vice-president of **National Carbon Company**, a division of **Union Carbide & Carbon Corporation**. Mr. Burnett was vice-president of **Oxweld Railroad Service Company** until recently, when its operations became part of the **Linde Air Products Company**.

Company as a sales engineer at Chicago.

Henry M. Viberg has been appointed chief mechanical engineer of the **Canadian Car & Foundry Company, Ltd.**, at the Longue Pointe plant.

G. F. Ryan has been appointed sales manager of the New York district for **Leschen Wire Rope Division**, **H. K. Porter Company**.

Organizations

The first annual Hoosier Traffic and Transportation Seminar, sponsored by the **Indianapolis Traffic Club** in cooperation with several other organizations and Indiana and Butler Universities, will be held at Butler University, Indianapolis, December 1. The program includes a panel discussion on "Competition—What We're Doing About It," in which Warren W. Brown, president of the Monon, will discuss the railroad viewpoint. James K. Knudson, legal counsel of the Transportation Association of America, will be dinner speaker, his topic being "Transport Competition—Government's Role."

H. J. McKenzie, president of the St. Louis Southwestern, will be the speaker at a meeting of the **Mississippi Valley Maintenance of Way Club** in the Hotel DeSoto, St. Louis, at 6:30 p.m., December 13. His topic: "Railroading and the Wide Open Spaces."

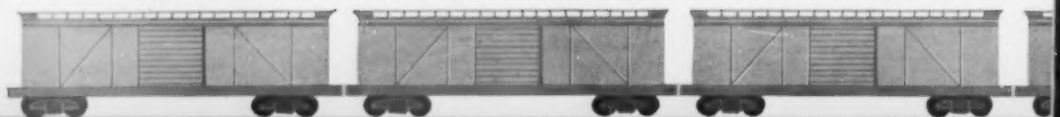
The annual dinner of the **New York Railroad Club** will be held at the Hotel Commodore at 7 p.m., December 9.

Here's what 17% more Horsepower **MEANS TO YOUR**



Compared to one 1500-h.p. GP7

1 1750-HP GP9 UNIT CAN PULL 3000 TONS 8%



Compared to two 1500-h.p. GP7's

2 1750-HP GP9 UNITS CAN PULL 4000 TONS 8%



Compared to three 1500-h.p. GP7's

3 1750-HP GP9 UNITS CAN PULL 5000 TONS 8%

YOU CAN earn more now—and for years to come—
with new General Motors Diesel locomotives.

These great new units have up to 17% more horsepower and increased tractive effort—can haul *more* tons on today's schedules or haul the same loads on *faster* schedules.

And you can also get this increased performance with your older General Motors locomotives by having

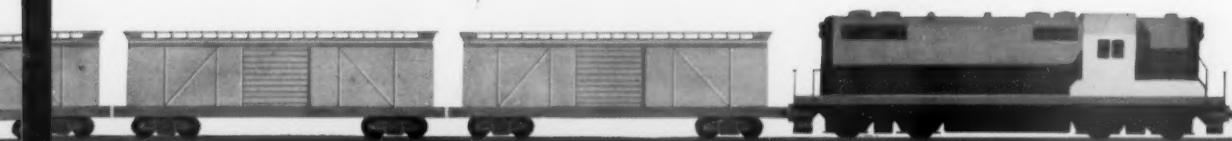
Electro-Motive bring them up to the same ratings and performance standards as new models.

For example, your F3 and F7 units can be converted to 1750-h.p. F9 models and returned to you with a full new-locomotive warranty.

But increased earnings are only part of the story. Improvements in design of major components bring big maintenance savings, too. For full details, call in your Electro-Motive representative or write:

in General Motors Locomotives

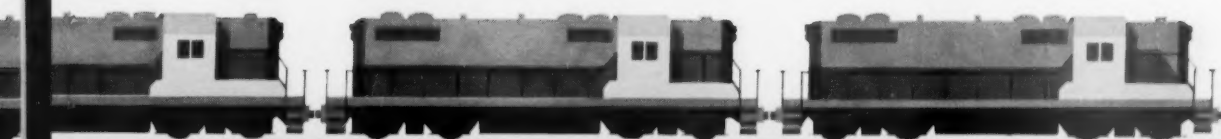
RAILROAD



FASTER OR 450 MORE TONS AT THE SAME SPEED



FASTER OR 600 MORE TONS AT THE SAME SPEED



FASTER OR 750 MORE TONS AT THE SAME SPEED

THE BEST LOCOMOTIVES ARE EVEN BETTER TODAY!

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS
LOCOMOTIVES

GENERAL MOTORS

La Grange, Illinois • Home of the Diesel Locomotive
In Canada: GENERAL MOTORS DIESEL, LTD., London, Ontario

TELL
 6800 Industrial Traffic
 Officers
**YOUR FREIGHT
 TRAFFIC STORY**
 in the January
PIGGYBACK
 PROGRESS REPORT of
*The traffic magazine
 that's part of the
 Railroad Team*

Railway Freight Traffic's service to shippers—and to railroads—steps off in 1955 with an informative roundup of features on trailers-on-flat-cars service.

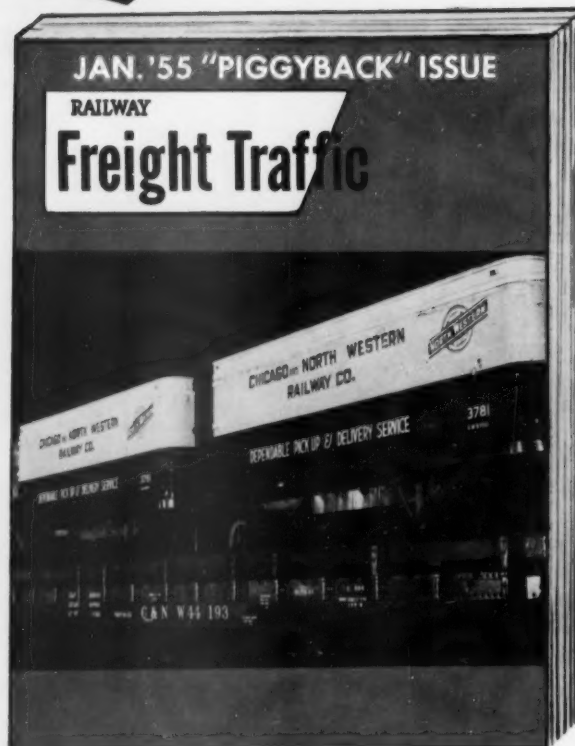
Here is a tentative partial list of articles: "Piggyback" Run-down—service of present rail-trailer freight services of all roads (information which every shipper will want to file); "Piggyback's" Future—thoughts of a railroad president on the subject; *How the Pennsy Solicits "Piggyback" Business*—interesting to railroads and shippers; *B & O Picture Story* of "piggyback" operations; "Piggyback" Growth on the C&NW; articles on tie-down apparatus; advertising "piggyback" and, of course, the regular and popular *Monthly Traffic Poll* (on "piggyback," naturally).

Railway Freight Traffic is always, every month, a productive medium for railroad advertising to shippers who count. And the January issue, with its added impact potential, certainly is the place to bring your freight service message to the attention of RFT's 6800 industrial traffic men readers. So reserve space and make copy plans at once; closing is only a few days off.

TO MANUFACTURERS: Advertisements on freight equipment, packing and handling equipment will benefit from the high interest-appeal of the January issue.

Railway Freight Traffic (by the publisher of Railway Age), 30 Church Street, New York 7, N.Y.

Closes Dec. 10, '54



What's New in Products



Typewriter Card Punch

Punched cards for accounting use are prepared as an automatic by-product of typewriting operations with a machine known as the typewriter card punch.

The new machine, available with non-printing and printing punches, consists of an IBM electric typewriter electrically connected by cable to an IBM card punch. It is said to be an advantage wherever typing operations normally constitute the initial step in accounting procedures.

Typewriter operation of the new machine is normal, except that upper-case operation automatically provides

for simultaneous card punching. Lower-case operation permits the typing unit and punch to operate independently. Variation of styles in upper and lower case enables the operator to distinguish between punched and unpunched portions of the typed documents. An alternate programming device permits punching two different types of cards while one document is in the process of being typed.

Thus, accounts payable check reconciliation cards and accounts payable distribution cards can be punched while the check and remittance advice is being typed. *International Business Machines Corporation, 590 Madison avenue, New York 22* •



Racor Stud Improved

Increased efficiency and reduced installation costs are reported to be the results of recent improvements made in the Racor Stud. The stud is now made of copper-bearing steel for corrosion resistance and is also available with a galvanized coating for use where corrosive brine drippings are found to be prevalent.

The improved stud has a gradually tapered blunt point instead of the former sharp chamfered blunt point. It is reported that the improved point

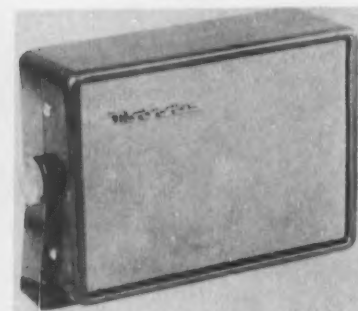
makes the stud easier to set for driving. *Ramapo Ajax Division, American Brake Shoe Company, Chicago Heights, Ill.* •

New Speaker for Mobile Radio

A new inverted cone speaker with a greater cone area than in standard mobile radios is now being shipped as a standard accessory with Motorola's mobile two-way radio unit. Advantages of this speaker are that the entire voice range transmitted is more uniformly reproduced without excessive attenuation of particular voice frequencies.

The speaker magnet assembly is actu-

ally inside the cone in order to reduce space requirements. The speaker housing measures only 8½ in. by 6¾ in. by 2¾ in. deep, including mounting bracket. Its water-resistant grill cloth, made of rayon flocked metal mesh, effectively protects the speaker cone



from splashing liquid and dust. *Motorola Communications & Electronics, Inc., 4501 West Augusta Blvd., Chicago 51, Ill.* •



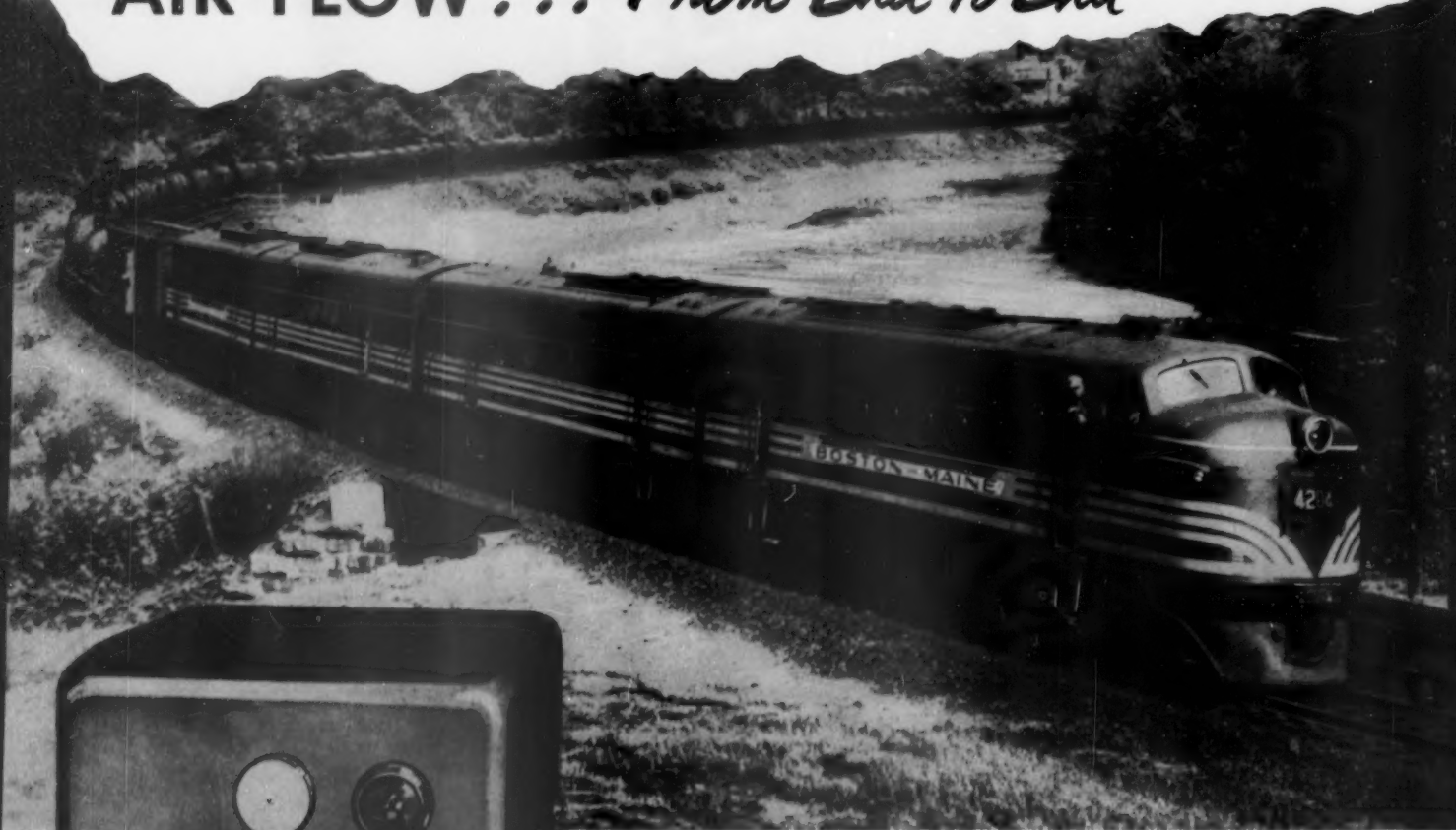
Rubber Stamp Press

A new rubber stamp press, capable of making rubber stamps up to 5½ in. by 4¼ in. in size, is now available for railway and other offices which consistently use a moderate volume of such stamps.

Taking less than one cubic foot of space, the new press is said to boast all the safety features of machines many times its price. Operated on 110-volt a-c, it is of steel construction with solid aluminum platens, and has all moving parts fully enclosed and protected from dust.

It is equipped with timer, warning bell, pilot light, heat indicator, thermostat control, and limit stops on vulcanizer and chase to guarantee uniform production. *Berkroy Products Company, 2512 North Ontario st., Burbank, Cal.* •

A CHECK ON TRAIN BRAKE PIPE AIR FLOW... *From End to End*



THE NEW YORK AIR BRAKE CO.
Type "B"
BRAKE PIPE
FLOW INDICATOR

From locomotive to caboose — the New York Type "B" Brake Pipe Flow Indicator keeps a *continuous* check on brake pipe flow conditions throughout the length of the train.

Thus, from his command post in the cab, the engineman can take immediate steps to avoid costly delays which could result from a variety of conditions. For instance, he can instantly spot potential trouble leading to train break-in-twos. If the conductor makes a brake application from the caboose or if brake system leakage is excessive — it is faithfully mirrored in the unit.

This highly practical, money-saving instrument is available for 32 or 64 volt operation. *Contact us for complete information.*

THE NEW YORK AIR BRAKE CO.
230 Park Ave., New York 17, N. Y.

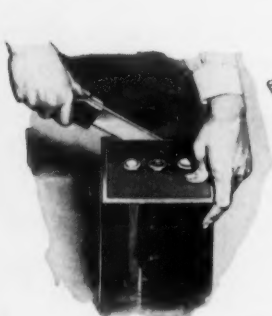
BATTERY MAINTENANCE TIP #2

from the GOULD Plus-Performance Plan

BEST WAY TO REMOVE ELEMENT FROM JAR

When accidental damage requires installing an element in a new jar, the element complete with cover must be removed. The Gould Plus-Performance Plan shows you how this can be accomplished easily and with safety.

**'DO IT
YOURSELF
AND SAVE
MONEY'**

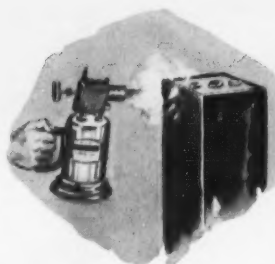


1. Cut Bond Between Cover and Jar

◀ Cut the compound from around the top of jar, using warm compound knife, keeping it very close to inside of jar wall.

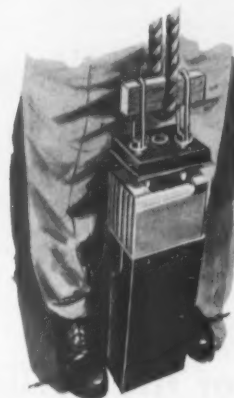
2. Heat Outside of Jar Before Pulling ▶

To make sure there is no hardened compound to restrain the pulling of the element, heat the outside top of all four sides of the jar with a blow torch. Warm thoroughly, but do not melt or burn the jar.



3. Pull Element from Jar ▶

Using Gould Jar Hold Down Clips (Part No. 2-1445) and Gould Cell Puller (Part No. 77061) as shown here, lift element halfway out of jar. Allow element to drain for minute or two, then remove and place immediately in new jar or lay it on flat insulated surface such as wood, for servicing.



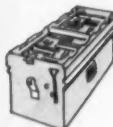
GOULD

Batteries

GOULD-NATIONAL BATTERIES, INC.
TRENTON 7, N. J.



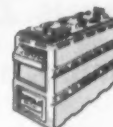
For Railroad
Air Conditioning
and Lighting



For Mine
Shuttle Cars
and Locomotives



For Electric
Industrial
Trucks



For Diesel
Locomotive
Starting



For Standby
and
Emergency Power

©1954 Gould-National Batteries, Inc.

Always Use Gould-National Automobile and Truck Batteries

Here is one more example of how the Gould Plus-Performance Plan can help you save money by performing many service operations in your own shop. For the complete Plan, mail the coupon TODAY.

BATTERY INFORMATION HEADQUARTERS

Dept. RA-114 Trenton 7, N. J.

Please send me, without charge or obligation, the Gould Plus-Performance Plan for _____ batteries.

(type or types)

Name _____

Firm _____

Address _____

City _____ Zone _____ State _____

from the
FIRST

to the
LATEST



**All of the Burlington's
famous Zephyrs
have been lubricated by...**

**STANDARD'S
Diesel Lubricating Oils**

The fact that the twenty-year old Pioneer Zephyr is still in daily operation on important runs is a tribute to the sturdiness and efficiency of the railway diesel. It is a tribute, too, to the skill and foresight of the men who plan and carry out Burlington's maintenance program.

We like to think that it also speaks volumes for the high quality of Standard Diesel Oil which has lubricated the Pioneer and all other Zephyrs throughout this twenty-year period.

STANDARD OIL COMPANY (Indiana)



Would Base Freight Rates on Car-Miles

A well-known British transport economist—Professor Gilbert J. Ponsonby of the University of London—has proposed* that carload freight rates be quoted, regardless of commodity, at so much per car-mile, plus a flat charge regardless of distance of so much a car (the flat charge to cover initial and final terminal handling). For example, in American terms, the rate on the contents of an 80,000-lb car might be 60 cents per car-mile plus a flat charge of \$20 per car. With such a rate basis, the actual car-mile and ton-mile revenues (assuming a load of 40 tons) would be as follows:

Haul (miles)	Revenue Per Car-Mile (cents)	Cost to Shipper Per Ton-Mile (cents)
100	80.0	2.000
200	70.0	1.750
300	66.6	1.666
400	65.0	1.625
500	64.0	1.600
600	63.3	1.583
700	62.8	1.571
800	62.5	1.562
900	62.2	1.555
1000	62.0	1.550

*In the September, 1954, issue of the Journal of the Institute of Transport.

Of course, if the commodity being shipped were of low density in relation to bulk, the shipper would not be able to load 40 tons per car. Maybe he could load only 20 tons—in which case his ton-mile rate would be twice as much. Still, such higher rates would probably not drive the business away from the rails in such a case, because the commodity would load just as lightly per cubic foot in a truck as in a box car. Professor Ponsonby would make a distinction in car-mile charges for cars of different sizes and, also, for cars with high construction or maintenance costs (refrigerators, for instance).

He would also take into account, in setting car-mile and flat-rate charges, the fact that some cars usually move empty in one direction. He would reduce or increase the car-mile rate, too, depending on whether the line to be traversed were expensive or economical to operate; and "incentive" reductions would apply in the direction of predominantly empty movement. Furthermore, he would make a concession to a customer

who sends out or receives more than one car at a time (to share with the customer some of the economies thus occasioned in the cost of industry switching).

This proposal is a radical one, all right—but not as radical, perhaps, as might appear at first glance. In this country, there are already some rates that vary with intensity of loading—less per 100-lb for high minimum loads than for low minima. William K. Tate, traffic vice-president of the Nashville, Chattanooga & St. Louis, in his recent paper in the "Inherent Advantages" contest (*Railway Age*, August 2, page 16), suggested basing LCL rates on "loadability" factors rather than primarily on the relative value of the goods being shipped. After all, the actual and proposed trailer-on-flat-car rates of so much per trailer-mile are no more nor less than the same kind of car-mile rates for trailer traffic that Professor Ponsonby is proposing for all traffic.

With the proposed flat charge of so much per car, regardless of distance moved, the characteristic "taper" of railroad rates would be retained—whereby the long-haul shipper pays somewhat less per ton-mile than the short-haul patron. Classification of freight would not be abolished—since there would continue to be a wide difference in the charge per ton-mile, as between commodities—but the classification would be automatic, and based on "loadability" (i.e., on comparative costs of rail movement) rather than on the assumed different "value of the service" to patrons.

Rates constructed as Professor Ponsonby suggests would be very simple to understand and would, consequently, make an enormous saving in clerical expense. They would probably drive some low-revenue traffic away from the railroads—but they could be made to assure high average car-mile earnings, combined with very attractive rates per ton-mile, from the customer's point of view, on desirable tonnage—rates so low, in fact, that competition for such traffic ought to become, pretty quickly, a thing of the past.

There may, no doubt, be some "bugs" in this idea and maybe they can be removed and maybe not. But the proposal is one that certainly has enough merit in it to warrant a lot of study and discussion. There can hardly, any longer, be any doubt that the classification of freight on the basis of a hypothetical "value" (at least, within the range of highway competition) no longer serves any useful purpose. In fact, classification on such a basis simply further confuses a problem that is too complex already for most average minds to grasp.



THE DL-600 and its twin unit DL-601 on display at South Station, Boston.

The Tour of the DL-600

How Alco's all-purpose 2,250-hp demonstrators ran up 50,000 miles of service on 23 roads from coast to coast

In September, American Locomotive Company's all-purpose 2,250-hp diesel locomotive, the DL-600, completed 50,000 miles of demonstration service on 23 railroads from coast to coast. Since January 26, when it was first coupled to a 20-car coal train on the Central of New Jersey, the DL-600 has proved its versatility in all types of single-unit and, with its sister locomotive the DL-601, multiple-unit service, under varied conditions, on every kind of right of way built for its weight limitations.

The outstanding performance feature is the adhesion inherent in the truck design and weight distribution characteristics of the new unit. The DL-600 has maintained adhesions of over 30 per cent and even on relatively bad rail the locomotives have been stalled under full power without wheel slip.

Ranking equally with adhesion as an important feature is the locomotive's 3,400-hp dynamic brake, which is the most powerful in railroad service today. This power has been demonstrated on numerous roads where the dynamic brake has held heavy trailing tonnages on long, steep grades without any application of air. The braking equipment is so arranged that it is automatically self protecting, making it unnecessary for the engineer to guard against overload. It is smooth and easy to apply and has helped to increase train operating

safety, because when the controller handle is moved into dynamic braking position the diesel engine's speed is equal to that of fourth-notch throttle position. This provides additional air to the train line and increases traction motor cooling capacity.

Cab design has also been a talking point on many roads. This was neatly summed up by one engineer who stated that, "At last somebody has built a locomotive with the crew in mind. For a change, everything is where it should be."

Central Railroad of New Jersey—The DL-600 completed 19 different types of freight and passenger assignments on the Jersey Central. Its usefulness in slow speed, heavy-tonnage work demanding extremely high tractive force was proved when it hauled an 1,849-ton freight from Ashley to Penobscot, Pa., over a ruling grade of 1.95 per cent at a minimum speed of 8.5 mph. The locomotive also demonstrated its capacity for handling heavy commuter trains on tight schedules during six round trips from Jersey City to Raritan, N.J., when it pulled 12 coaches plus a unit for head-end lighting with on-time performance.

Western Maryland—In ten days of regular service the DL-600 covered a total of 1,235 miles on the Western Maryland. Its versatility and performance were proved in heavy freight service throughout a major por-



THE TOUR OF THE DL-600 COVERED 23 RAILROADS AND 50,000 MILES.

- | | | | |
|---|----------------------------|---------------------------------|-----------------------|
| 1. Boston-B&M, NYNH&H, NYC | 13. Manver-NYC | 27. Cincinnati-E&O | 41. Two Harbors-DM&IR |
| 2. Portland-B&M | 14. Wilkes-Barre-PRR | 28. Deshler-B&O | 42. Virginia-DM&IR |
| 3. Lowell-B&M | 15. Harrisburg-PRR | 29. Chicago-B&O | 43. North Platte-UP |
| 4. White River Junction-B&M | 16. Pittsburgh-PRR | 30. Frankfort-NYC&StL | 44. Cheyenne-UP |
| 5. Mechanicsville-B&M | 17. Reading-Reading | 31. Charleston-NYC&StL | 45. Ogden-UP |
| 6. New London-NYNH&H | 18. Bethlehem-CNJ | 32. Madison (St. Louis)-NYC&StL | 46. Salt Lake City-UP |
| 7. Poughkeepsie-NYNH&H | 19. Allentown-CNJ, Reading | 33. Bement-Wabash | 47. Las Vegas-UP |
| 8. Maybrook and Campbell Hall-NYNH&H, NYO&W | 20. Mauch Chunk-CNJ | 34. Peoria-NYC&StL | 48. Los Angeles-UP |
| 9. Rensselaer-NYC | 21. Jersey City-CNJ | 35. Clinton-C&NW | 49. Bakersfield-SP |
| 10. Lyons-NYC | 22. Baltimore-WM | 36. Boone-C&NW | 50. Roseville-SP |
| 11. Buffalo-NYC, PRR | 23. Cumberland-WM, B&O | 37. Council Bluffs-C&NW | 51. Sparks-SP |
| 12. Newberry Junction-NYC, Reading | 24. Elkins-WM | 38. Kansas City-Wabash | 52. Klamath Falls-SP |
| | 25. Grafton-B&O | 39. Duluth-DM&IR | 53. Eugene-SP |
| | 26. Clifton Forge-C&O | 40. Proctor-DM&IR | 54. Portland-SP |

tion of the system and in switching and transfer service in the Chiefton and Gray areas. Operating in transfer service at Chiefton, the DL-600 handled approximately double the tonnage then assigned to steam power. On one trip from Chiefton to Ida May, the Alco demonstrator hauled 65 empties of approximately 1,450 tons over a 1.82 per cent compensated grade at an average speed of $10\frac{1}{2}$ mph. Descending heavy grades, the DL-600 exerted about 75 per cent more dynamic braking effort at most speeds than one of the road's standard units.

New York Central—On the New York Central, the DL-600 and DL-601 proved their versatility by handling mail and express, fast stock train and heavy tonnage assignments. A highlight of this demonstration came when the units outran the schedule of X-43, a mail and express train, between Syracuse and Buffalo by 26 min. The two diesels ordinarily assigned to this run have difficulty maintaining the schedule because of 65 mph gearing. Another high spot occurred when the units, in multiple-unit, hauled an 80-car, 6,400-ton train at a minimum speed of 12 mph over Fleming Summit on the Manver-to-Cherry Tree, Pa., coal run. The three-unit, 4,800-hp locomotive regularly assigned takes a maximum of 70 loaded cars. On the downgrade from Fleming Summit to Cherry Tree the 6,800-hp dynamic braking capacity of the two units enabled the engineer to hold train speed to 28 mph.

Pennsylvania—The DL-600 all-purpose demonstrators were given freight, commuter and switching assignments on the Pennsylvania. Operating between Altoona and Pittsburgh over the Horseshoe Curve on a ruling grade of 1.85 per cent, the demonstrators showed that a two-unit 75-mph geared DL-600-type locomotive, if operated with Alco two-unit, 75-mph geared, 3,200-hp

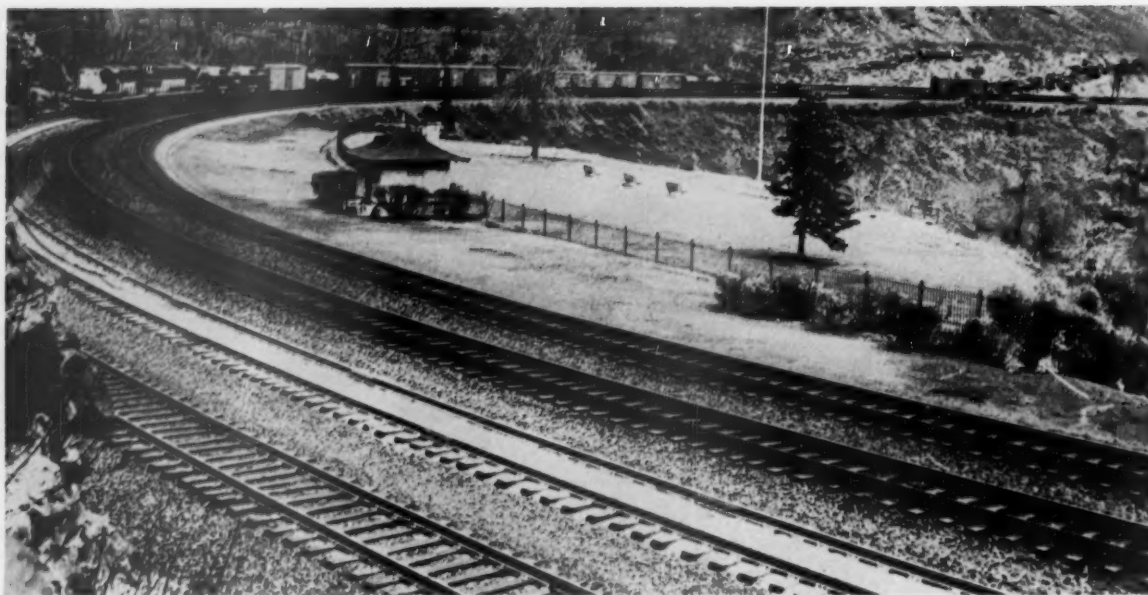


LEAVING New Harbors Yard with an ore train on the DM&IR.

DL-600 DEMONSTRATION RUNS IN PASSENGER SERVICE

	No. of runs	Train-miles		Car- miles	Max.	Av.	Running time,	
Road		Trip-Total		Trip- Total	speed, mph	speed, mph	hr-min	Trip-Total
Central of New Jersey ¹	12	35.8	430	5,941	70	32.8	1-14	13-6
New Haven	9	75.4	679	8,837	80	41.6	1-49	16-19
N. Y. Central	5	98.8	494	10,424	76	50.8	1-57	9-43
Union Pacific ..	2	785.0	1,570	2,669	79	43.0	8-57	35-31

¹Single unit. Commuter service.



THE TWIN UNITS rounding the Horseshoe Curve on the PRR.

pushers, would be capable of handling the road's requirements in this territory.

Wabash—Heading into the heart of the Midwest, Alco's new units demonstrated on the Wabash on manifest freight service out of Decatur, Ill., to Chicago, St. Louis and Kansas City, and exceeded required average speeds and scheduled running times on every train hauled.

In the Decatur-Kansas City run, pulling trains Nos. 90 and 91, the locomotives beat the timetable even when hauling more than the usual tonnage. Powering Train 90, made up of 113 cars, or 6,022 adjusted tons, the demonstrators averaged 41 mph between Kansas City and Moberly as against the 31.3 mph called for in the timetable, and completed the entire four-hour schedule in three hours and twelve minutes. This run normally is handled by three 1,500-hp freight units.

Union Pacific—The DL-600 and DL-601 had ample opportunity to demonstrate their potentialities in 17 days of fast freight, passenger, ore drag and helper service from one end of the UP system to the other.

On time-freight assignments the demonstrators equaled or bettered the performance of locomotives currently pulling the same trains. Some of the highlights of the freight demonstrations were the Sherman Hill run, a 1.55 per cent compensated grade, where both units pulled 1,960 trailing tons at 29 mph while running west on the Wyoming division; the fine performance of the dynamic braking during descent of the 62-mile long Wahsatch-Ogden grade; and hauling 2,935 trailing tons up Cajon Pass at a minimum speed of 12 mph.

Powering passenger train 37 between Salt Lake City and Los Angeles, the DL-600 and DL-601 in multiple-unit outran the schedule by 40 min; arriving in Las Vegas nine minutes early after leaving Salt Lake City 31 minutes late. The versatility of the DL-600's design is emphasized by comparing the 79 mph reached twice on this run with the locomotives' performance on slow speed, heavy-drag assignments.

In ore train service, the locomotives were operated as single units. On one run DL-601 developed an adhesion of 25 per cent with no wheel slip. Next day, DL-600 countered with 27.3 per cent. DL-601 also surpassed her own performance by taking 2,000 tons up the 2.5 per cent grade to Iron Mountain unassisted. Probably the best test of the entire demonstration was DL-601's performance on the Lund-Latimer run where the locomotive, developing 27 per cent adhesion, started 9,515 trailing tons up a 0.34 per cent grade after taking a train into the hole at Thermo for a meet.

Spokane, Portland & Seattle—While on the west coast the demonstrators operated for two days on the Oregon Trunk district of the SP&S. One of the most impressive tests on this road was a multiple-unit freight demonstration over the 1.5 per cent ruling grade between Wishram and Bend, Oregon. Here the units pulled 3,987 trailing tons on a run where three 1,600-hp road freight units are normally assigned to haul a maximum of 3,000 tons.

Duluth, Missabe & Iron Range—Heading back into the Midwest, the DL-600 and DL-601 were demonstrated in ore service on the DM&IR. At the New Yard, where iron ore is received, each demonstrator was assigned a train just one ore car short of the spur limit. The demonstrators repeatedly developed adhesion percentages in the high twenties at Two Harbors Yard, and on several occasions the heavier DL-601 developed slightly over 31.5 per cent adhesion at 1,750 amp exerting 125,000 lb tractive force.

The fuel economy of the DL-600 was proved in seven multiple-unit freight runs between Missabe Range ore pick-up points at Two Harbors, Biwabik and Rainy Yard, where the units' fuel consumption average 1.26 gal per 1,000 gtm.

Following the DM&IR demonstration, the DL-600 and DL-601 were placed in service in the Chicago area on the Chicago & North Western; Toledo, Peoria & Western;



COMING into Jersey City with a JCL commuter train.



IN VALLEY stretch near Missoula, Mont., on the NP.

Elgin, Joliet & Eastern and Illinois Central. They are now completing test assignments on the Rock Island. Future demonstrations also are scheduled on the Denver & Rio Grande Western, Milwaukee, Louisville & Nashville, and Central of Georgia.

The DL-600* is powered by the improved Alco Model 244, V-type diesel engine which furnishes 2,250 hp to the heavy-duty generator for traction. The engine is equipped with Alco's new and simplified Model 710 water-cooled turbosupercharger which makes possible greater engine efficiency, better combustion characteristics, a reduced noise level and a cooler engine room. Another innovation is a new excitation system which has

been improved by the elimination of many moving, and thus wearing, parts. These include the amplitudne exciter and 400 cycle set, which have been replaced by an alternator. Other DL-600 features are passenger-locomotive riding qualities made possible by its modified swivel, equalized pedestal-type trucks; larger lube-oil filtering capacity, larger capacity fuel-oil pump, and additional after-cooler for engine intake air.

A hood-type locomotive of general road switcher design, the DL-600 is built to operate with its short nose forward. Distinctive cab features are the new, low control stand which also improves the engineman's visibility, two high-capacity air induction heaters and heavy, noise-eliminating insulation throughout.

*A complete description of the DL-600 appeared in *Railway Age*, March 1, 1954, p. 22.

DL-600 DEMONSTRATION RUNS IN FREIGHT SERVICE

Road	No. of runs	—Train-miles— —Trip-Total—		Car-miles	Max. tractive force, lb	Running time, hr-min —Trip-Total—		Ton- miles (000)	Av. speeds, mph
Central of New Jersey ¹	13	53.0	690	63,763	76,000	2-9	38-7	3,945	18.3
Western Maryland ¹	14	86.8	1,215	77,203	96,000	5-2	73-8	3,341	16.6
Boston & Maine	24	63.4	1,522	144,064	121,000	2-7	50-56	5,672	29.9
New Haven	12	58.8	707	52,654	54,500	1-57	23-22	2,537	30.2
New York Central	47	50.3	2,365	261,980	60,000	1-51	86-54	12,415	27.3
Reading ²	44	22.7	998	.....	.....	0-45	33-1	.....	30.1
Baltimore & Ohio ²	49	47.0	2,300	.....	.....	1-32	75-45	.....	30.5
Chesapeake & Ohio	24	60.7	1,453	102,841	140,000	2-20	56-4	8,608 ³	26.0
Nickel Plate ²	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wabash	27	87.8	2,370	233,715	62,500	2-35	69-49	11,810	34.0
Union Pacific ¹	35	143.0	5,006	314,341	116,000	4-34	159-29	14,053	31.4
Southern Pacific	54	123.0	6,721	675,360	82,000 ⁴	4-32	245-48	26,638	27.4
Spokane, Portland & Seattle	6	113.0	674	66,658	71,500	4-23	28-17	3,259	23.9
Northern Pacific	12	124.0	1,485	120,283	110,000	4-15	50-59	7,675	29.1
Duluth, Missabe & Iron Range	14	63.9	893	96,380	156,000	4-12	58-50	7,855	15.2
Chicago & North Western	14	96.0	1,341	154,128	120,000	2-47	38-57	7,593	34.4

¹Single unit.

²Data incomplete. Units demonstrated in multiple with other types of power, in single-unit and together in multiple-unit arrangement.

³Adjusted ton-miles (000).

⁴Data for eight single-unit runs not available.

⁵DL-600 only. DL-601 off line on single-unit demonstration.

How the UP Sells Destinations

A weekly column for newspaper travel editors wins friends and boosts the carrier's share of vacation business

A new twist in railroad travel promotion—a “syndicated” newspaper column that proclaims the wonders of the West but never mentions the carrier’s name—is being used effectively to win new customers for resort areas served by the Union Pacific.

Using the catchy head, “Wish You Were Here,” the travel column appears weekly from May through Labor Day and once a month the rest of the year. It supplements a broad program of travel promotion in which the UP uses motion pictures, lecturers and a vast array of photographs.

Using the catchy head, “Wish You Were Here,” the participating newspapers their own roving reporter in the West. And the travel editors apparently love it. Last summer, the first season the column was “offered,” it appeared in 65 leading newspapers having a combined circulation of around 15 million. The resort areas are happy, too, because it has meant wide publicity and new business for them. For the UP the benefits are obvious: By encouraging travel to vacation spots in its territory the road stands to pick up a lot of new passenger business.

The idea for the weekly travel column originated with David J. Phillips, a member of the UP’s public relations staff. In his contacts with travel editors of newspapers, he found that many papers were not using travel publicity provided by carriers, resorts and other sources because, they said it amounted to nothing more than “statistics out of a book” wrapped up in a lot of adjectives.

So, Mr. Phillips concluded, why not fill the gap? The UP serves a large part of the West where national parks and forests and other vacation areas are located. He took the idea to William R. Moore, general director of public relations for the UP, who at once saw merit in the plan. A letter of inquiry went out to some 140 metropolitan newspapers.

“Would you be interested,” Mr. Moore asked them, in a travel column prepared for weekly distribution, on an exclusive basis, to selected metropolitan newspapers?”

“Copy will be completely divorced from the adjective-laden travel puff. It will have a fresh ‘you-are-there’ approach, because the writer won’t be doing them out



WILLIAM R. MOORE, general director of public relations, authorized the UP’s new venture in travel promotion.

of travel books in his office. He’ll be on the scene, writing his date-lined columns from favorite American vacationlands and little-known byways . . . The writer will be your own correspondent, traveling the romantic West and writing about it for your readers, exclusively for your paper.

“What’s the Union Pacific angle? Only this: To tell people about the great American West, the regions served by the UP. We won’t suggest that your readers go there via UP—that’s the job of the railroad’s advertising department, not ours. There will be no commercial slant in our copy.”

Newspaper reaction to the query was prompt and favorable. It was evident at once that careful handling of the proposed column would pay off in all around better relations with the press. Care was taken to set up standards which would assure this end. The column was placed on a strictly “syndicated” basis, going to only one newspaper in each city. Arrangements were made to provide suitable photographs with the stories.

It was decided that Mr. Phillips must actually take part in vacation activities offered at places the column would cover. In this way the travel story could be told in terms of people he met and things he did—a case of giving the reader a vicarious part in each “vacation.” To capture this “spell” of the West, Mr. Phillips spent last summer doing such things as riding a mule from the rim to the floor of Grand Canyon, camping in abandoned mining shanties on top of the Continental
(Continued on page 44)



THIS SPECIAL HEADING, on letterheads and envelopes, helps promote the column and give it “personality.”



DIESEL SHOP is a 260-ft by 400-ft steel-and-brick structure. Heavy repairs are performed in high-bay section, running repairs in low bay in left foreground. Remainder

of building behind low-bay section houses offices, storerooms, machine shop, parts cleaning room and wash and locker rooms.

NEW ARGENTINE DIESEL FACILITIES—Part I*

This Large Maintenance Shop . . .

- Has record crane capacity
- Employs new ventilating theory
- Is heated by radiant system

If you want to count cars on his railroad, a Santa Fe man will tell you to go to Kansas City, where traffic density generally is the system's heaviest. So it is also with motive power. Approximately 383 diesel locomotive units are maintained at Kansas City, and to handle light, as well as some heavy, repairs, inspection and servicing tasks on these units the road recently constructed an all-new diesel maintenance terminal at that point.

Included in the installation are a 260 by 400-ft diesel shop, a 16-track locomotive storage and ready yard and three 3-unit outdoor servicing tracks in addition to numerous auxiliary facilities. The new installation is currently servicing about 140 diesel units in each 24-hr period, or about one unit every 10 minutes.

The facility is in Kansas City, Kan. a short distance east of the road's Argentine hump-retarded classification yard. The site was formerly occupied by a coach-servicing yard which was abandoned when this function for Santa Fe equipment was taken over by the Kansas City Terminal in 1950.

*The outdoor sanding, fueling, watering and washing facilities at Argentine will be described in Part II of this article, scheduled to appear in next week's *Railway Age*.

Diesel maintenance had been carried out in the old roundhouse, where temporary platforms and other facilities had been in use since 1948. One of the principal difficulties experienced with the old set-up was the inability of the roundhouse turn-table to handle more than two units at a time, thus making it necessary to break up three and four-unit locomotive combinations.

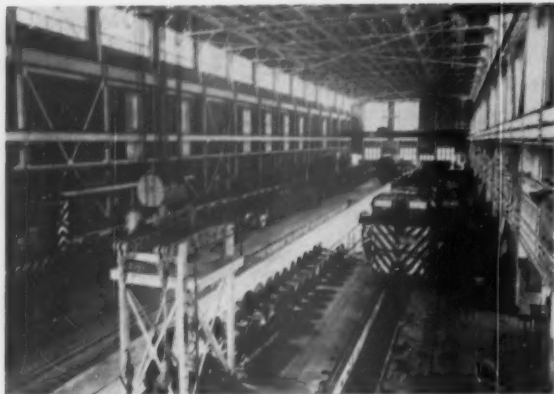
In designing the new shop and auxiliary facilities, a thorough study was made of several diesel shops on various railroads over the country. This was done with the idea of profiting from experience with the various types of plant layout, equipment, etc. Santa Fe officers feel that, aided by this pre-construction survey, they have been able to develop the most up-to-date and efficient operating installation of its kind built so far.

The shop building proper is divided into three main sections: A heavy repair section in a high bay extending the full length of the north side of the structure; a light-repair section in a low bay alongside the high bay and extending about half the length of the building; and a 2-story portion comprising the remainder of the structure, which houses a machine shop, parts-cleaning room, offices and diesel parts storerooms, as well as wash and locker rooms for employees.

Construction Features

The entire building is of steel-frame construction with columns in the high bay supported by reinforced concrete foundations carried on 12-pile clusters of Ray-

In High Bay . . .

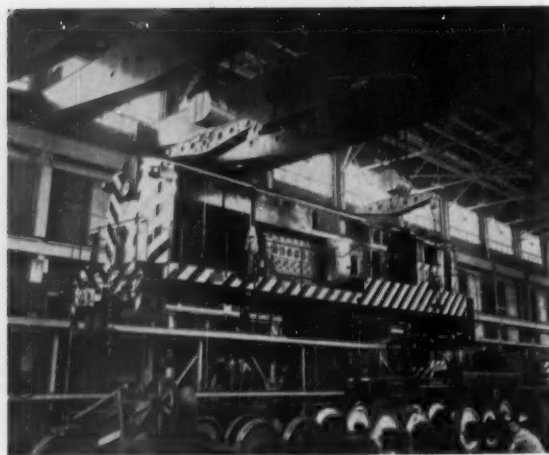


HIGH BAY has three pit tracks where truck work and some heavy overhaul is performed.

mond step-taper piling, 70 ft in length. Elsewhere the columns rest on 4-pile clusters of Raymond standard straight-taper piling, averaging 33 ft in length. These pilings consist of steel shells driven to the desired depth, then filled with concrete.

Neither the exterior nor interior walls of the structure are load bearing. The exterior walls, excepting the north wall of the high bay and the south wall of the low bay, are of brick with some stone trim. The north and south sides of the high and low bays, respectively, are covered with a combination of Mahon, insulated, corrugated metal wall panels and corrugated wire glass.

Principal interior walls are brick, while others are of concrete block and glazed-tile construction. Individual offices in various sections of the building are separated by Hauserman partitions, made of asbestos-cement sheets. Floors throughout the building are reinforced concrete, which is treated with a metallic hardener in the shop area. Floors in the storeroom and most of the wash rooms are painted. Floors in the office portion are finished with Tilex plastic asbestos tile, while those in some wash rooms are of quarry tile. Finish walls



OVERHEAD CRANES, with capacity of 125 tons each, are able to pick up entire diesel unit.

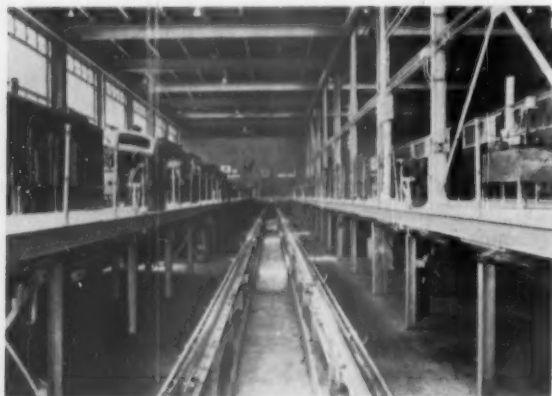
throughout are plastered except in wash and locker rooms where they are glazed tile. Ceilings in the offices are of acoustical tile while those in wash and locker rooms and corridors are of plaster.

The entire roof is tar and gravel applied over 1 in. of Fiberglas insulation on a steel roof deck. The roof is supported by steel trusses in the high bay and by steel purlins and cross beams in the remainder of the building. Ventilating skylights have been installed in the roof of the low-bay and storeroom sections. Truscon projected-type steel windows have been used extensively at various locations in the building, while double-hung steel sash are used elsewhere, primarily in the office section. Fenestration at other locations consists of corrugated wire-glass sections used largely in conjunction with projected-type windows.

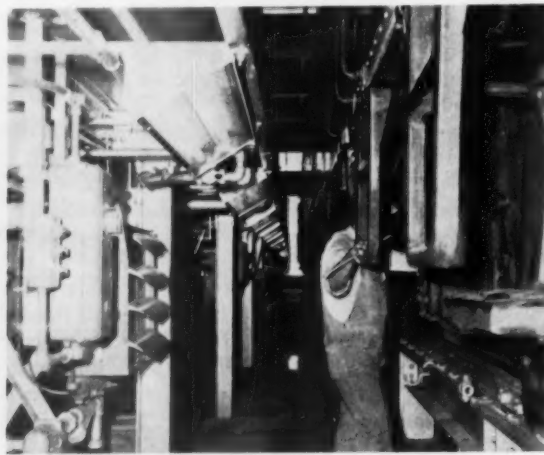
Conventional Servicing Arrangement

The servicing and light-repair section, contained in the low bay, is generally of conventional design with four 4-unit stub ended pit tracks supported on steel "chairs" and served by steel platforms at cab-level height.

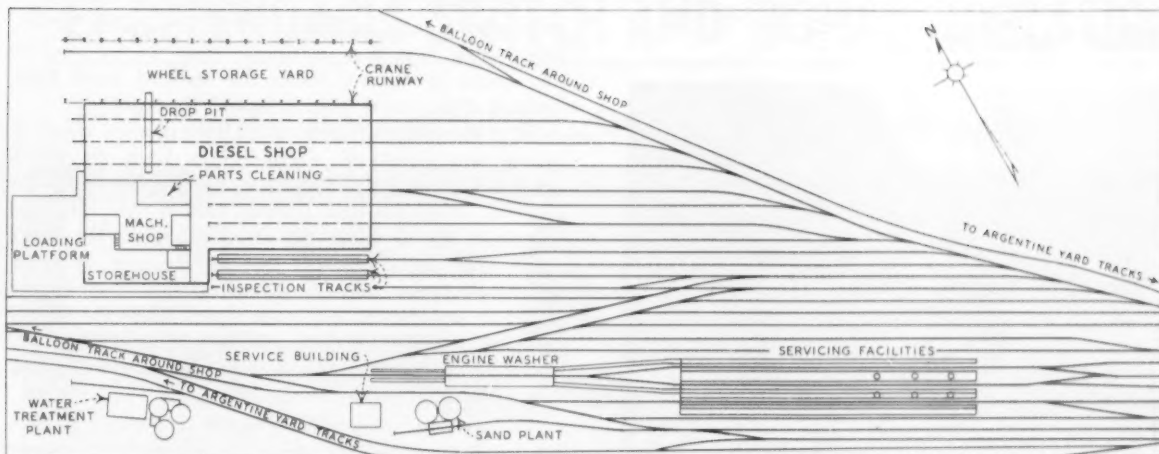
In Low Bay . . .



LOW-BAY section, which handles running repairs, has four, four-unit depressed servicing tracks.



SERVICING PITS are lighted by fluorescent fixtures. Grid unit heaters are used to clear ice and snow off trucks.



LOCOMOTIVE TERMINAL is all new and includes diesel shop, a 16-track storage and ready yard and a 3-track

servicing facility. Layout permits quick handling of power through terminal which processes 140 units every 24 hr.

Lighting in the pits is by Pyle National fluorescent fixtures which can be controlled from either end of the service area, as well as from the pits. The pits are served by color-coded lines for supplying air, steam, water and lubricating oil and for draining off used water and oil. At intervals along each track in the pits Grid unit heaters are so located that warm air can be blown on locomotive trucks to clear off ice and snow in bad weather.

At the stub ends of the servicing tracks is a cross corridor, depressed about two feet below the bottoms of the pits. At the end of each pit is a hydraulic lift which workmen use to raise and lower heavy equipment between the floors of the pits and the connecting corridor. No ramps are used around the pit area. Also located in this corridor are storage-tank outlets which supply various oils and greases used in pit-servicing operations.

The elevated servicing platforms in the light-repair section are connected at the stub ends of the tracks by a cross platform at the same elevation as the first-floor level of the office and shop section. Each of the two pairs of servicing tracks is served by a 5-ton Yale

overhead tram-beam hoist. Overhead lighting in this section is provided by mercury-vapor fixtures.

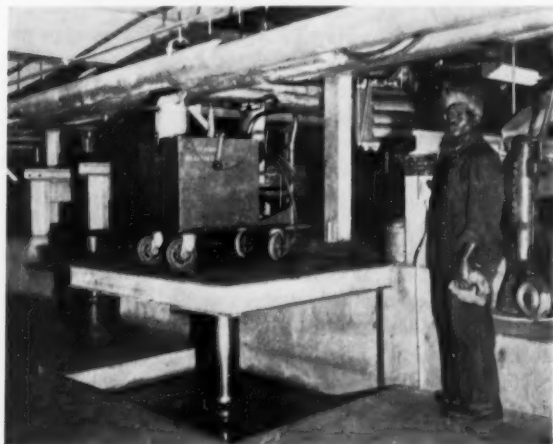
The heavy repair section in the high bay is also generally of conventional design. This section is served by three tracks with full-length inspection pits. Top-of-rail elevation of these tracks is at floor level. These tracks are also stub ended, but provision has been made to convert them into through tracks, when and if desirable. A Whiting drop pit for handling single pairs of wheels serves all three tracks and extends outside the building to a wheel storage yard along the north side. Doors in both sections are Truscon accordion-type.

Overhead Cranes Can Lift Unit

An outstanding innovation in the heavy-repair section is the overhead crane system. The high bay, in addition to having a 15-ton overhead crane, has two 125-ton units which together are capable of picking up an entire locomotive unit and moving it to any point in the shop area over the tops of the other engines. This is reportedly the first diesel shop ever equipped with enough crane capacity to lift a complete locomotive unit. All of the cranes used in the heavy-repair section were supplied by the Whiting Corporation.

Probably the most revolutionary feature of the shop building is the heating and ventilating system employed in both the light and heavy repair sections. The system involves a comparatively new concept in heating and ventilating theory centered around the establishment of a restricted "zone" of air circulation. Basis of the new design is the fact that diesel fumes rise while warm, but on cooling have a tendency to settle. In designing the ventilating system, a means was sought whereby diesel fumes could be carried out of the shop area before becoming sufficiently cool to settle into the working level.

The overhead crane installations in both the light and heavy repair sections precluded the use of hoods over the tracks. A system employing exhaust fans in the roof drawing fresh air from the floor level up was not considered desirable for winter operation since satisfactory heating of the working level with such an



HYDRAULIC LIFTS are installed at the end of each pit for use in raising and lowering servicing equipment.

Other Facilities . . .



WHEEL STORAGE yard along north side of high bay is served by 30-ton overhead crane. Future plans call for enclosing this yard.



MACHINE SHOP is equipped with machine tools, work benches and air-powered hoists. In background is foreman's office.



STOREROOM has metal parts-storage shelves, painted floors, fluorescent lighting in the main aisle and individual incandescent lighting on each storage aisle.

arrangement would be difficult, if not impossible. It was felt, though, that if a restricted "zone" of air circulation could be effected above the working level, then heating of the lower portion would be easier.

With this idea of restricted circulation in mind, a system was developed which brings fresh air along the side walls of the shop area at about the level of the top of a locomotive unit. Exhaust fans in the roof draw this fresh air in under the diesel exhausts. The fresh air is then pulled upwards through the roof, carrying the diesel fumes with it. Air circulation theoretically does not penetrate to any great extent below the top-of-locomotive level, and the incoming supply of fresh air, in effect, forms a protective layer between the diesel fumes and the working level.

The system consists of metal fresh air ducts, 1 ft 9 in. by 8 ft in cross section, which are installed with outlets at about the top-of-locomotive level at intervals along both sides of the wall dividing the high and low bays. Nine of these ducts serve the high bay, while seven are in the low bay. There are also two ducts feeding into the parts cleaning and machine-shop areas. In the roof of the high bay 28 1½ hp power exhaust ventilators, with a capacity of 11,500 cfm each, have been installed at intervals along the length of the area. In the low-bay section are 16 of the same type units placed in the roof. In addition there are three fans which exhaust the parts cleaning and machine shop sections.

Radiant Heating in Shop Area

Heating in both the light and heavy repair sections is by a radiant system installed in the concrete floors. The system employs Byers wrought iron tubing through which warm water is circulated. The water is maintained at a constant temperature, usually around body temperature. The rate of circulation of the water is varied by thermostatic control, increasing or decreasing as the outside temperature goes down or up. With this radiant system a continuous supply of warm air rises from the concrete floor, thereby maintaining the entire working area at a comfortable temperature. Water for the system is heated by steam which, along with other steam requirements, is supplied from a central plant.

Radiant heating in the high-bay section is supplemented by Grid unit heaters located along the north and south walls of the area. Heating in the remainder of the building, except in the offices, is also supplied by unit heaters. In the offices heating is by fin-tube radiators along the baseboards. The entire second-floor office area is air conditioned with a 20-ton unit. The offices of the diesel foreman and clerks, located on the first floor, are also air conditioned.

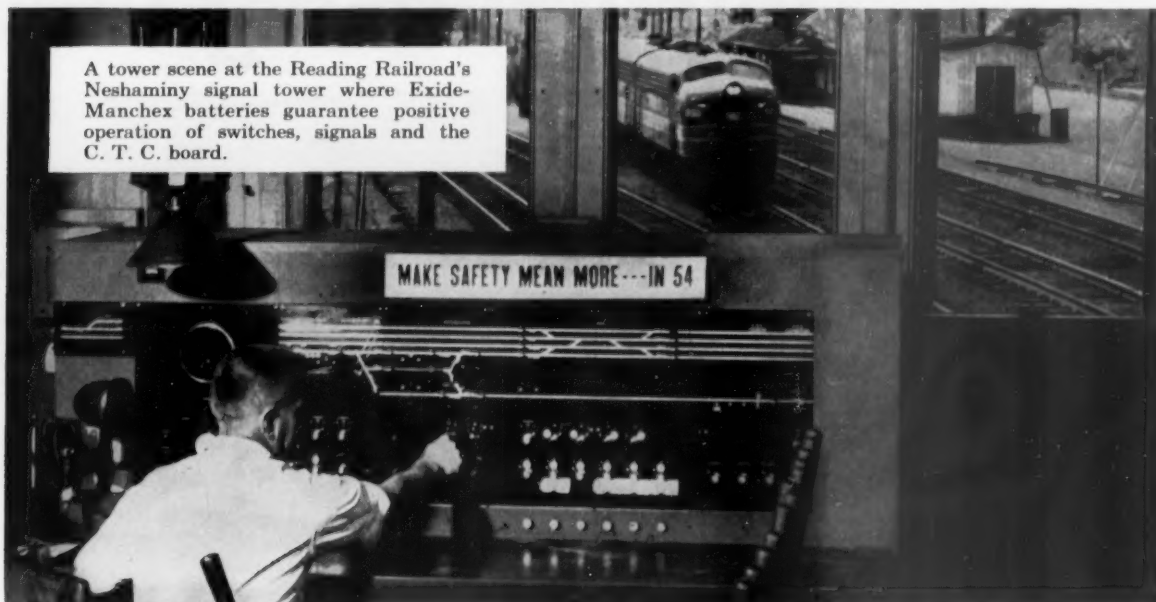
Two 5-ton Montgomery Moline freight elevators serve the first and second floors. One of these units operates between the second-floor storeroom and the storehouse and loading platforms below, and the other between the storeroom and the first floor of the light repair section.

The entire diesel shop and surrounding facilities are served by a paging speaker system, supplied by R. W. Neill & Co., which includes separate microphone units in the master mechanic's, clerks' and shop foreman's

(Continued from page 42)

GET DEPENDABLE SWITCH AND SIGNAL OPERATION

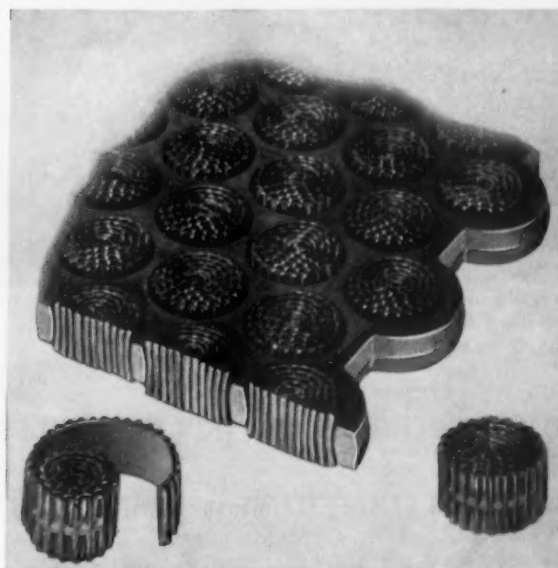
...with powerful Exide-Manchex batteries!



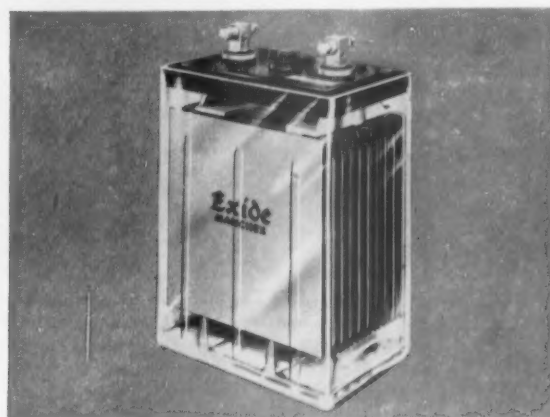
A tower scene at the Reading Railroad's Neshaminy signal tower where Exide-Manchex batteries guarantee positive operation of switches, signals and the C. T. C. board.

THE TREND in signal towers is to more equipment in less space, more safety for faster traffic! For signal, switch, C. T. C. power that you can trust for long, trouble-free service...specify Exide-Manchex batteries. Power is

delivered at needed rates, providing steady performance with a high sustained voltage. Lower costs for operation, maintenance and depreciation make Exide-Manchex signal batteries your best power buy—AT ANY PRICE!



THE POSITIVE PLATES are the heart of any battery. Only Exide uses the famous manchester positive plates with buttons of active material. These buttons, inserted in a strong alloy grid, provide a large reserve of power. They provide high capacity in a compact space, and they assure unusually long battery service life.



DEPENDABLE POWER, easy maintenance (water is needed only about twice a year) is built into an Exide-Manchex. For full details, call your Exide sales engineer—write for Form 5001 (Engineering and Maintenance Manual).

Your best power buy
... AT ANY PRICE!

Exide[®]
MANCHEX[®] BATTERIES

Exide INDUSTRIAL DIVISION, The Electric Storage Battery Company, Philadelphia 2, Pa.

They're making older



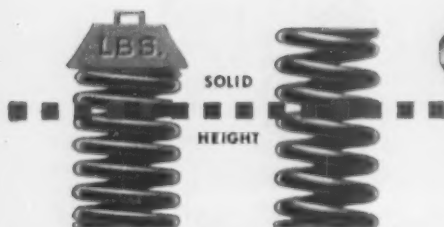
Santa Fe Reefer being brought up to modern riding standards. This car is one of thousands that have been equipped with smooth-riding ASF Ride Control Packages. Installation is simple: just jack up the bolster, pull all the old short-travel springs, slip in the Ride Control Package.

Why a small per-car investment in Ride Control Packages can pay you big returns

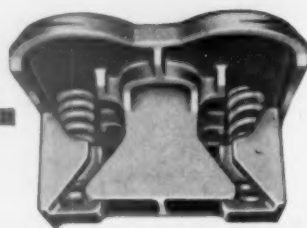
SMOOTH, SAFE RIDING AT SPEEDS TO 100 MPH

FEWER LADING DAMAGE CLAIMS

LOWER MAINTENANCE COSTS



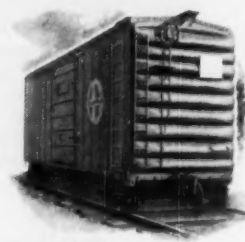
Long-travel springs . . . for soft, impact-absorbing spring action, whether the car is empty or fully loaded. Your choice of 2½" or 3" spring travel.



Constant friction control . . . prevents harmonic oscillation of springs. Induction-hardened friction surfaces keep it constant—for years of service.



The inevitable result of a smoother riding freight car is greater protection of lading—especially when running in modern speed ranges.



The car that rides smoother is the car that requires less maintenance and fewer repairs. And, even the roadbed stands up longer!

On the Santa Fe, a continuous program of modernization adds weight to the slogan, "Ship Santa Fe all the way." Here's how

cars ride better than ever!

The Santa Fe repair program offers a good example of how older freight cars can be brought up to modern riding standards—at costs which are soon written off.

During scheduled repairs, the Santa Fe has equipped 4271 reefers and 983 50-ton box cars with ASF Ride Control® Packages, the self-contained units with built-in long-travel springs, *constantly controlled* by induction-hardened friction surfaces.

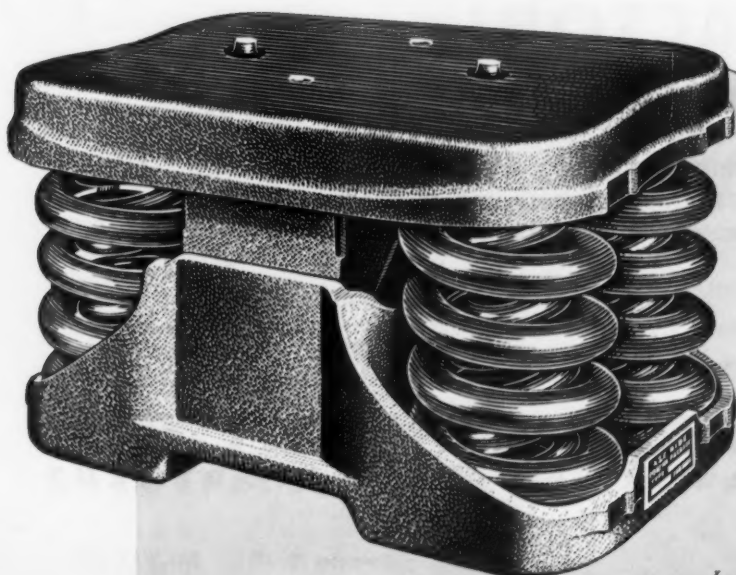
Standard procedure, as cars are shopped, is to first check the condition of the trucks. If side frames and bolsters don't meet AAR standards, they are replaced with ASF Ride Control Trucks. But in the thousands of cases where trucks are up to standard, the old short-travel

spring groups are simply replaced with Ride Control Packages. Time required for the change: less than a half-hour.

Result? Cars that ride better than ever before. *Cars that cut lading claims and cost less to maintain.* In short, here's how a leading railroad is providing smoother, safer freight hauls. And, *repeat orders* for Ride Control Packages prove that the Santa Fe's modernization program is paying off.

Find out how Ride Control Packages can help you keep your older cars in first class condition—and cut lading claims as well. Your ASF Representative has facts and figures on the practicability of making *smoother riding* another objective of any general repairs program. Write us today!

Bring your older cars up to modern riding standards




with
ASF

**RIDE-CONTROL
PACKAGES**

AMERICAN STEEL FOUNDRIES

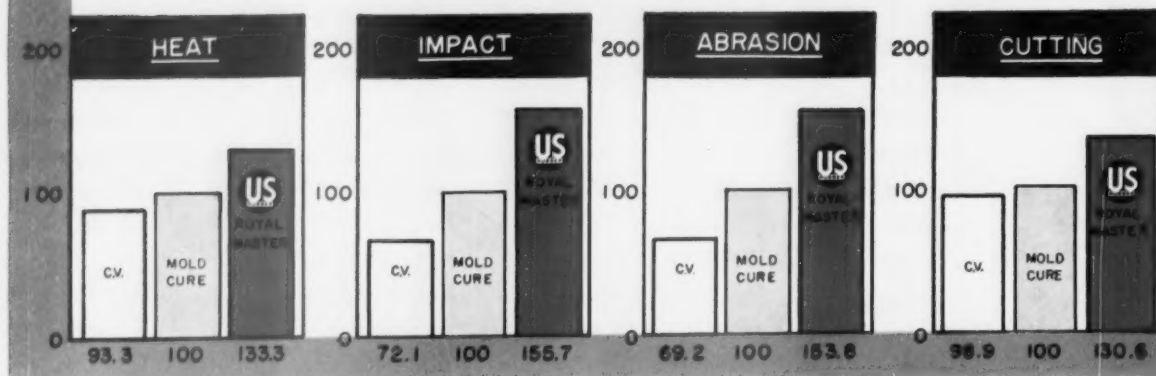
410 N. Michigan Avenue, Chicago 11, Illinois

Look for this MINT  MARK on the running gear you specify

Canadian Sales: International Equipment Co., Ltd., Montreal 1, Quebec

STARTLING

Comparative performance of portable cords related to major life factors.



New U. S. ROYAL MASTER portable cord PROVES SUPERIOR TO ALL OTHERS IN EVERY SERVICE FACTOR!

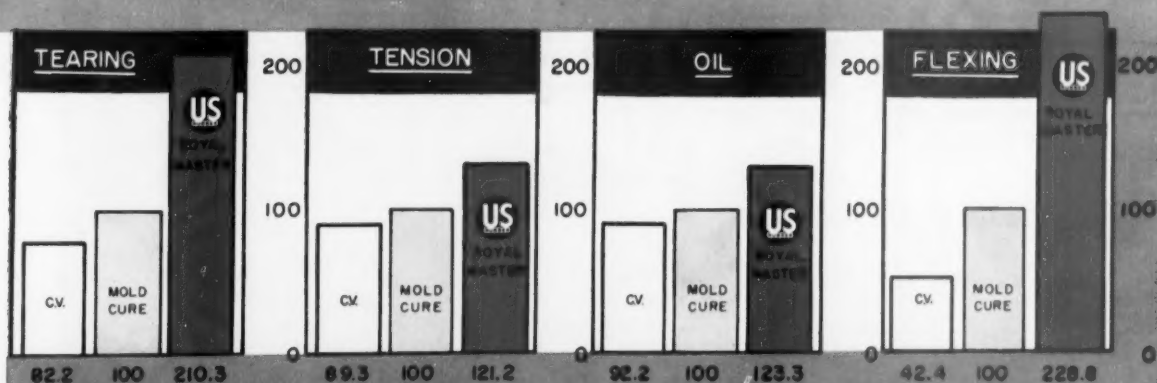
Newly developed U. S. Royal Master Cord gives almost twice the service of other molded cords — gives \$1.88 value for every cord \$1.00!

Life factor charts illustrate outstanding superiority of new U. S. Royal Master over the average of both the molded cords and the short-lived continuous vulcanized cords of other makes.



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Approved by Underwriters' Laboratories, Inc.

Cord construction completely reexamined. Over two years ago, U. S. Rubber engineers began a thorough reexamination of electrical cord design and construction. More than a thousand cords, including those of all major competitors as well as our own U. S. Royal Cord, were thoroughly and painstakingly analyzed. Over 10,000 tests were made to determine the principal causes of cord failure.

Every possible life factor was carefully and honestly appraised to find its relation to overall cord service.

With the findings at hand, "U. S." Engineers then drew upon their 64 years of experience in the manu-

facture of fine quality wire and cable to produce this exceptional new cord.

Every fault uncovered by the exhaustive two-year testing was tackled and solved.

Tested and proved. The new U. S. Royal Master was then tested against all competitive cords—installed in outside plants for final on-the-job corroboration.

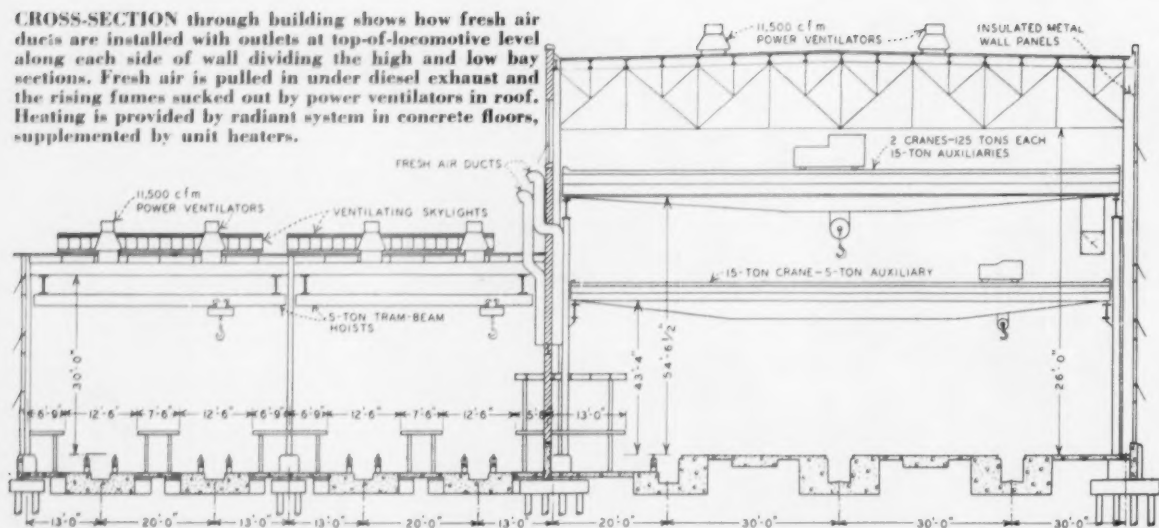
U. S. Royal Master Cord proved itself to be unquestionably the finest cord you can buy!

So superior, it gives almost double the service life of the average of competitive molded cords—actually gives you \$1.88 in value for every cord dollar!

Prove for yourself the outstanding superiority of new U. S. Royal Master Portable Cord—in both service life *and* economy! Get in touch with your "U. S." distributor today!

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CROSS-SECTION through building shows how fresh air ducts are installed with outlets at top-of-locomotive level along each side of wall dividing the high and low bay sections. Fresh air is pulled in under diesel exhaust and the rising fumes sucked out by power ventilators in roof. Heating is provided by radiant system in concrete floors, supplemented by unit heaters.



NEW MAINTENANCE SHOP

(Continued from page 36)

offices. In addition, strategic points in the shop and at outlying points are connected by an intercommunication system operated through the central telephone switchboard at Argentine.

Crane for Wheel-Storage Area

The wheel-storage yard flanking the north side of the shop building is served by a Whiting 30-ton overhead crane. One of the crane runways is carried by the north wall of the shop building while the other is supported on steel framing. It is planned at some future

date to enclose this yard using the existing steel framework.

On the south side of the building are two additional depressed servicing tracks equipped in the same manner as those in the low bay except that there are no elevated platforms. The outside tracks are used for servicing overflow units on which pit work primarily is to be done. A concrete platform at car-floor height extends along the south and west sides of the storeroom and machine shop section. The south leg of the platform, 175 by 10 ft, is served by a track. The west section is a truck-loading and storage platform, 125 by 100 ft.

In conjunction with construction of the new diesel facilities two of three existing 55,000-bbl oil tanks were relocated across the Eighteenth Street Trafficway, north

HOW SANTA FE DIESEL POWER IS POOLED

The Santa Fe is completely dieselized. Passenger locomotives are operated in two pools protecting all service for the system. The large transcontinental passenger pool operating between Los Angeles-Chicago-Galveston (Tex.) consists of 219 units with maintenance centered primarily at Barstow, Cal. The second passenger pool of 20 units operates out of Chicago to Oklahoma City, Dallas, and Paris, Tex., with maintenance centered at Chicago.

Freight locomotives are operated primarily in five pools. One, known as the "Barstow Pool," consists of 324 Type F7 units operating between Barstow-Belen (N. M.)-Clovis (N. M.)-Waynoka (Okla.) with running maintenance centered at Barstow and heavy maintenance at San Bernardino, Cal.

The second, the "Cleburne (Tex.)-Argentine (Kansas City)-Corwith (Chicago) Pool," consists of 357 units. This pool also handles main-line freight business between Chicago-Waynoka and Chicago-Denver-Amarillo-Clovis-Sweetwater (Tex.), with running maintenance centered at Argentine and Cleburne and heavy maintenance at Cleburne.

The third pool consists of road-type switchers

operating south of Cleburne to Silsbee and Galveston, and west to Sweetwater. There are 90 units in this pool with all maintenance centered at Cleburne. The two other freight pools cover the territory north of Bakersfield, Cal., and south of San Bernardino, and each comprises some 41 road-type switchers with running maintenance centered at Richmond, Cal., Bakersfield and San Bernardino, and with heavy maintenance at San Bernardino.

Diesel power for all other relatively short territories, which also consists of road-type switcher units, has running maintenance centered at the various terminals where the locomotives are assigned, with heavy maintenance handled at the closest large shop.

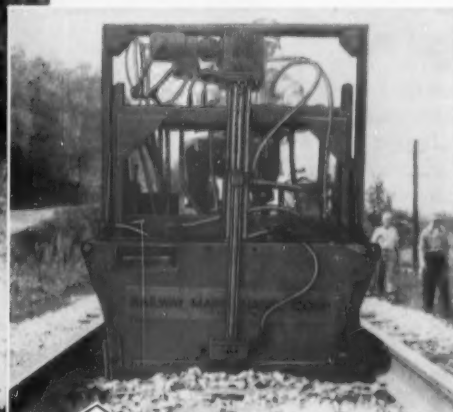
This system pooling of power permits the majority of all running repairs covering routine maintenance, mileage, and form-inspection work, to be handled at three points, namely, Barstow, Cleburne, and Argentine. Road-type switchers and yard engines receive their running maintenance at division points where assigned. Heavy repair work, with minor exceptions, is all handled at the two main shopping points, San Bernardino and Cleburne.

NEW MACHINE-

Lines up to **6,000** feet
of track per day!



1: Lining head and spud anchor
in moving position.



2: Head and spud anchor being
lowered to lining position.



3: Machine in lining
position with
spud anchor
driven into
the roadbed.

R.M.C.
LINE Master

The LineMaster requires two men—an operator and a man for sighting. It is capable of making throws up to 6". Machine does not obstruct sighting of the rail on either side. Track is not raised by the lining operation.

The LineMaster is mounted on a hydraulically driven crawler tractor which operates on the ties between the rails. Can be removed from the track at any point, using turntable carried on the machine—or at a crossing without turntable. Ask for Bulletin No. 1154.

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of the shop building. New pumphouses and unloading facilities have been built to handle the transfer of fuel oil from tank cars to storage tanks and thence to the various fueling stations.

Track Layout Gives Flexibility

The track layout at the shop is such that engines, after passing through the sanding, fueling and watering and washing operations, can continue on around a "balloon" track to a lead on the north side of the yard and thence onto tracks into the shop. In other instances, engines can move over this north lead to the main line or onto storage tracks. Engines can also, upon leaving the servicing facilities, back up either of two leads in the south section of the yard and move onto storage tracks or farther north onto tracks into the shop, as desired. Thus an engine can be turned in direction or remain headed in the same direction and yet be routed easily and quickly into any desired location in the yard.

Design and construction of the new diesel terminal were carried out under the general direction of the chief engineer, Eastern Lines, with the assistance of the engineer shop extensions—system. The diesel shop was built by the Swenson Construction Company, Kansas City. Winston Brothers Construction Company, Minneapolis, performed all of the grading work for trackage and auxiliary facilities.

• • •

HOW UP SELLS DESTINATIONS

(Continued from page 32)

Divide, riding horseback on dude ranches and trout fishing in Wyoming.

Because the column has, on a few occasions, ventured into such things as offering tips to the traveling businessmen, Mr. Phillips likes to think of it as a sort of public service feature. "We feel we are indebted to the travel editors," he explains, "because those fellows make a business of influencing people to travel. Since we are in the travel business ourselves, we like to show them we appreciate it."

No mention of the Union Pacific appears in "Wish You Were Here," a point which makes the column quite unusual in promotion literature. There have been some cases, of course, where travel editors have, on their own, inserted mention of the railroad in the stories. But this is infrequent and unsolicited.

"The column recognizes," Mr. Phillips says, "that people aren't going to get up and go some place simply because they read a railroad's name in print." They are interested in destinations. So our objective is to stimulate interest in travel itself—an objective which is shared with travel editors and accounts for their interest in the column.

The public relations department of the railroad feels that its weekly travel column has an important by-product in creating good will with chambers of commerce and other groups in the publicized vacation spots. As each column appears a wide distribution in mimeograph form is made "back home" in vacationland.

Benchmarks and Yardsticks

THERE DOESN'T SEEM to be any system of education, anywhere, that aims to develop the "whole man"—not only his mind and his body, but his emotions and his human relations, his moral and aesthetic standards, and so on.

Most formal education—whether "practical" or "theoretical"—does little more than cram the student with information, some of which is useful and some of which he retains. Physical education, one usually gets only incidentally, if he happens to be interested in sports; and moral and aesthetic sense, and ability at human relations, usually come—if at all—as a by-product of experience.

Under such circumstances it is not to be wondered at that most people are lopsided in their development. Some high-powered intellects have come to public notice, which were so immature on the emotional and human relations side as to have got involved with Commies—as companions if not colleagues.

The so-called "intellectuals" feel abused when they are designated as "egg-heads." The very term "intellectual," itself, seems to carry some faint odor of slander. Of course, there is nothing shameful in the possession of a good intellect—but a good intellect, by itself, is not of much use. It usually has little value unless it is intermixed with the quality known as horse-sense, which may be even harder to acquire than intellectual competence.

The man who is all brain and no brawn, or vice versa—who is 50 years old mentally and 10 years old emotionally or morally—is a problem to himself; and perhaps even more to his associates.

Such considerations are of the utmost importance to people with supervisory responsibilities—because, to do their work successfully, they need to take account of their own lopsidedness, and endeavor to correct their deficiencies. Even beyond that, they also need to be able to help their subordinates recognize and correct *their* deficiencies; and they have to perform this service, usually, without being detected in doing it.

No matter what the job is, a fully developed person will usually do it better than the half-person or quarter-person. Since the supervisor's assignment is to get the job done as satisfactorily and as economically as possible, he cannot fulfill it wholly unless he has skill in helping subordinates develop all their favorable potentialities.

In a recent column in the Hearst papers, Bruce Barton reported that business executives are rapidly becoming an unusually healthy tribe—what with the strict regimes of diet and exercise that many of them follow. That is all to the good, and it would be even better if the self-improvement program included other undeveloped potentialities beyond the physical.

J. G. L.

Leading the Way—Regardless!

By Hungerford



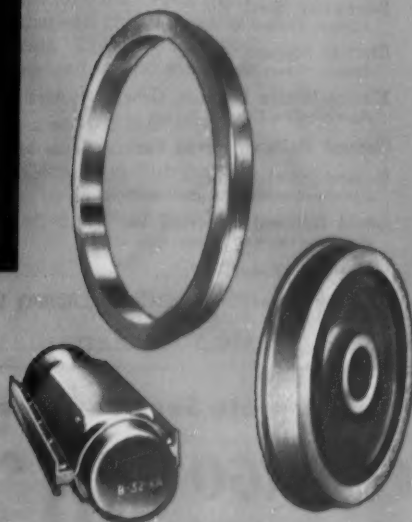
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The Panama Canal



*Laying Kerite Cable
across the Isthmus, 1908*

Since it was first manufactured almost a century ago, Kerite insulated cable has been closely integrated with the international development of the communications industry. One of the most important installations of Kerite cable was made in 1908 across the Isthmus of Panama, a distance of 50 miles, uniting the Atlantic and Pacific ocean cables.

Early performance records of this outstanding product indicated that Kerite cable was unusually well equipped to withstand the extremely severe conditions attending this tropical installation. This cable, originally laid on the ground in the jungle, was submerged for 30 miles in Gatun Lake upon completion of the canal.

As a result of the operation of this initial cable, a second one was installed in underground ducts in 1918 under the supervision of Mr. C. R. R. Harris, now President of The Kerite Company. Subject to similar adverse conditions, this cable continues to perform the important function for which it was designated at a critical point in communications history.

*The value and service life of a product can be
no greater than the integrity and craftsmanship of its maker.*



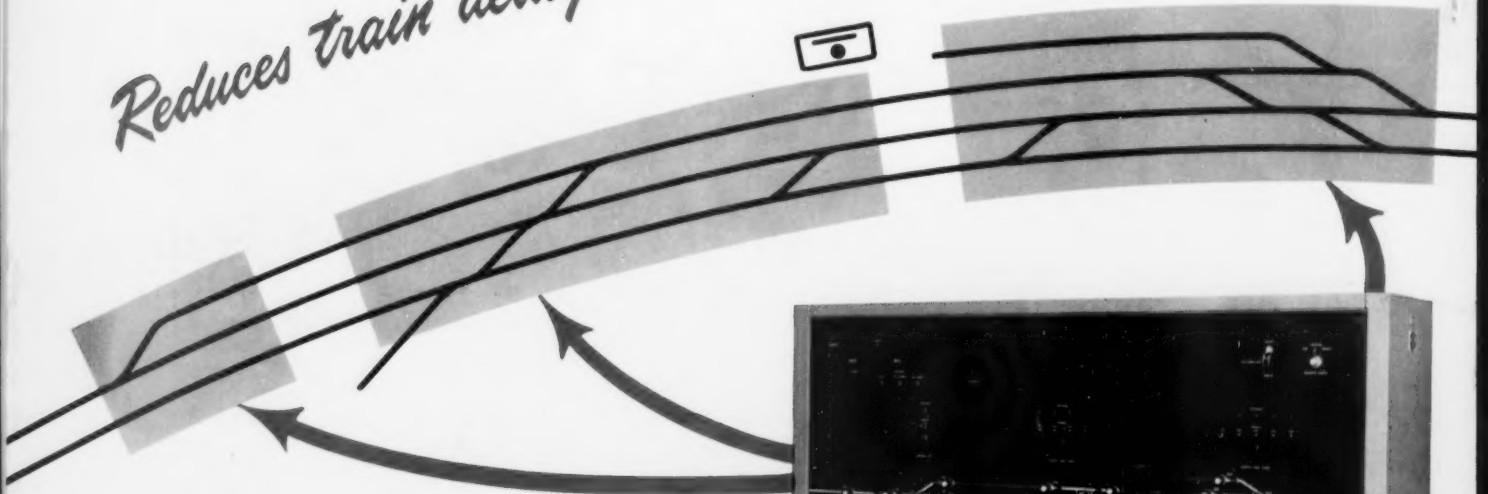
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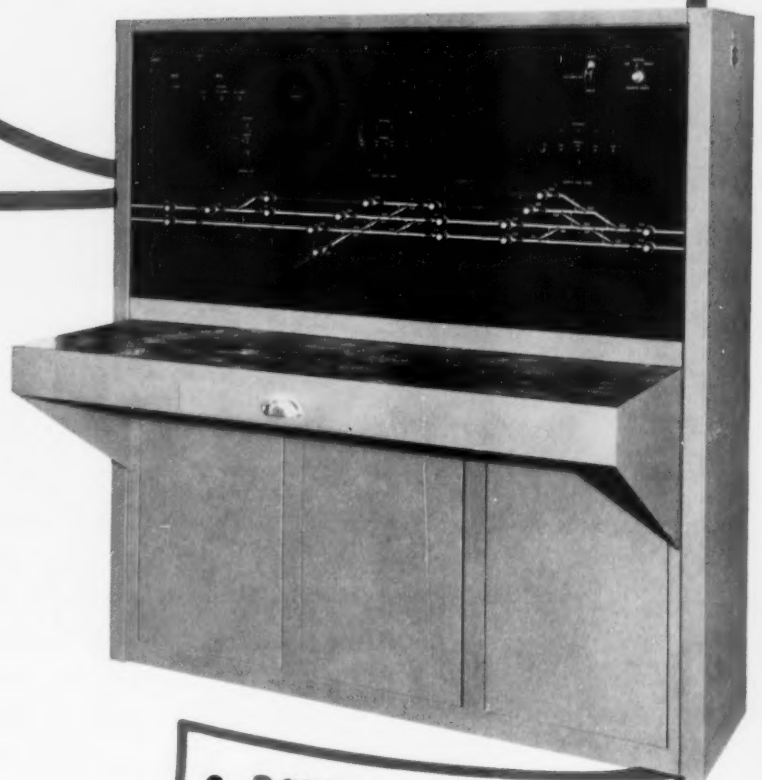
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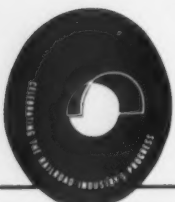
A Midwestern railroad has improved train operation at the entrance of a large freight yard by consolidating the control of three interlockings in a single NX machine. Many train stops and delays have been eliminated, efficiency of yard operation has been increased.

With NX control, two motions suffice to set up even the most complex route. If the preferred route is not available, NX automatically selects the next best available route. NX interlocking control is ideal, therefore, for the consolidation of large, busy interlockings. NX is flexible, too. You can at any time choose the method of operation that meets your needs.

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